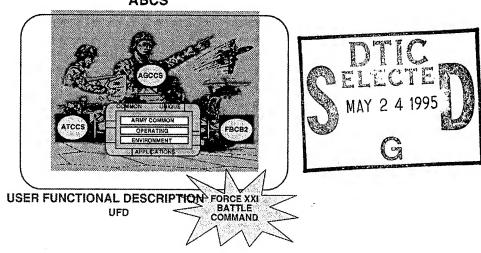
SUBMITTED IN PARTIAL SATISFACTION OF CONTRACT # DABT65-93-D-0002, DELIVERY ORDER 0030

TO
MISSION CONTRACTING ACTIVITY

ARMY BATTLE COMMAND SYSTEM ABCS



TRADOC PROPONENCY INTEGRATION OFFICE - ABCS

ARMY BATTLE COMMAND SYSTEM (ABCS)
LAYER 4 COMMON CORE APPLICATIONS

March 31, 1995

EER SYSTEMS CORPORATION

DISTRIBUTION STATEMENT A

Approved for public release; Distribution Unlimited SYSTEMS

TRAINING SYSTEMS DIVISION 529 DELAWARE STREET LEAVENWORTH, KANSAS 66048

1593 SPRING HILL ROAD VIENNA, VIRGINIA 22182

19950522 091

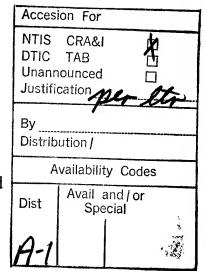
DITIO QUALITY INEPECTED 6

EER Systems Corporation Training Systems Division

529 Delaware Street Leavenworth, Kansas 66048 (913) 651-2332

Contract Title: Analytical Support to Combined
Arms Center

Contract Number: DABT65-93-D-0002



Sponsoring Agency:Battle Command Battle Laboratory U.S. Army Combined Arms Center Fort Leavenworth, Kansas 66027-5300

Contracting Officer's Representative: Mr. Calvin Johnson

Submitted in Partial Satisfaction of: Delivery Order 0030

BATTLE COMMAND BATTLE LAB (BCBL)

TRADOC PROPONENCY INTEGRATION OFFICE (TPIO) - ABCS

ARMY BATTLE COMMAND SYSTEM (ABCS)

"The view, opinions and findings contained in this document are those of the author(s) and should not be construed as official Department of the Army position, policy, or decision, unless so designated by other official documentation."

TABLE OF CONTENTS

SECTION		PAGE
		iixxxvi
SECTION 1	INT	RODUCTION 1-1
	1.1	Purpose
	1.2	Common Applications
	1.3	Force XXI Battle Command Brigade and Below (FBCB2) 1-2
	1.4	User Requirements
SECTION 2	FRIE	ENDLY SITUATION FUNCTIONAL DECOMPOSITION 2-1
	2.1	Function Name
	2.2	Purpose of Function
	2.3	Function Description
	2.4	References
	2.5	Functional Requirements
	2.5.1	Maintain Friendly Unit Status Data
	2.5.1.1	Add Friendly Unit Status Data
	2.5.1.2	Update Friendly Unit Status Data
	2.5.1.3	Delete Friendly Unit Status Data
	2.5.1.4	Store Friendly Unit Status Data 2-8
	2.5.1.5	Query for Friendly Unit Status Data
	2.5.1.6	Distribute Friendly Unit Status Data
	2.5.1.7	Display Friendly Unit Status Data
	2.5.1.7.1	Friendly Resources-Detailed Table 2-9
	2.5.1.7.2	Friendly Resources-Summary Chart 2-10
	2.5.1.7.3	Friendly Resources-Gumball Chart
	2.5.1.7.4	Friendly Resources-Subunit Summary Situation Report 2-11
	2.5.1.7.5	User-Defined Chart
	2.5.1.8	Print Friendly Unit Status Data
	2.5.1.9	Receive Friendly Unit Status Data 2-12
	2.5.1.9.1	Receive Subordinate Unit's Unit Status Data 2-13
	2.5.1.9.2	Receive Adjacent Unit's Unit Status Overlays 2-13
	2.5.1.9.3	Receive Higher Headquarter's (Force Level Control Higher [FLC-H]) Unit Status Data
	2.5.2	Manage SITMAP Display 2-13
	2.5.2.1	Select Map from SITMAP Library 2-14
	2.5.2.1.1	Download Maps From Other Electronic Media 2-14
	2.5.2.1.2	Scan Paper Mapsheets and Multispectral Imagery (MSI) 2-15
	2.5.2.1.3	Use DMA Mapping Products
	2.5.2.2	Control General SITMAP Functions 2-15
	2.5.2.2.1	Control SITMAP Display Features
	2.5.2.2.2	Change Viewed Area of Display 2-16
	2.5.2.2.3	Change Grid Coordinate Display 2-16
	2.5.2.2.4	Magnify and Reduce Display View
	2.5.2.2.5	Create Panbox for Area of Operation/Interest
	2.5.2.3	Display Locations and Distances 2-17

		PAGE
2.5.2.3.1	Display Labeled Map Location	2-18
2.5.2.3.2	Display Distance Between Points	
2.5.2.3.3	Display Circular Map Area	2-18
2.5.2.3.4	Display Distance Over Curved Path	
2.5.2.4	Provide Expanded SITMAP Data Display	
2.5.2.5	Display Map Overlays	
2.5.2.5.1	Perform General Overlay Control Functions	
2.5.2.5.2	Print Overlays	
2.5.2.5.3	Provide Overlay Computational Capabilities	
2.5.2.5.4	Display Friendly Unit Overlay	
2.5.2.5.4.1	Compute Subunit Center of Mass	
2.5.2.5.4.2	Create the Friendly Unit Display	
2.5.2.5.4.3	Calculate Forecasted Unit Locations	
2.5.2.5.4.4	Create Friendly Track Overlay	
2.5.2.5.4.5	Modify the Friendly Unit Display	
2.5.2.5.4.6	Delete the Friendly Unit Display	
2.5.2.5.4.7	Store the Friendly Unit Display	
2.5.2.5.4.8	Display Currency of Friendly Unit Data	
2.5.2.5.5	Display Functional Overlays	
2.5.2.5.5.1	Display Fire Support (FS) Overlays	
2.5.2.5.5.1	Receive FS Target Overlays	
2.5.2.5.5.1.1	Store FS Overlays	
2.5.2.5.5.1.2	Delete FS Overlays	
2.5.2.5.5.2	Display Intelligence and Electronic Warfare (IEW) Overlays	
2.5.2.5.5.2.1	Create IEW Overlays	
2.5.2.5.5.2.2	Modify IEW Overlays	
2.5.2.5.5.2.3	Receive IEW Overlays	
2.5.2.5.5.2.4	Store IEW Overlays	
2.5.2.5.5.2.5	Delete IEW Overlays	
2.5.2.5.5.3	Display Air Defense (AD) Overlays	
2.5.2.5.5.3.1	Receive AD Overlays	
2.5.2.5.5.3.2	Delete AD Overlays	
2.5.2.5.5.3.3	Store Air Defense Overlays	
2.5.2.5.5.4	Display Aviation (AVN) Overlays	
2.5.2.5.5.4.1	Create AVN Overlays	
2.5.2.5.5.4.2	Modify AVN Overlays	2-30
2.5.2.5.5.4.3	Delete AVN Overlays	2-30
2.5.2.5.5.4.4	Store AVN Overlays	2-30
2.5.2.5.5.4.5	Receive AVN Overlays	2-30
2.5.2.5.5.5	Display Control Measures Overlays	2-31
2.5.2.5.5.5.1	Create Control Measures Overlays	2-31
2.5.2.5.5.5.2	Modify Control Measures Overlays	2-31
2.5.2.5.5.5.3	Delete Control Measures Overlays	2-31
2.5.2.5.5.5.4	Store Control Measures Overlays	2-32
2.5.2.5.5.5	Receive Control Measures Overlays	2-32
2.5.2.5.5.6	Display Combat Service Support (CSS) Overlays	
2.5.2.5.5.6.1	Create CSS Overlays	2-32
2.5.2.5.5.6.2	Modify CSS Overlays	2-33
2.5.2.5.5.6.3	Delete CSS Overlays	2-33
2525564	Store CSS Overlays	

SECTION	I	PAGE
2.5.2.5.5.6.5	Receive CSS Overlays	2-33
2.5.2.5.5.7	Display NBC Overlays	2-33
2.5.2.5.5.7.1	Create NBC Overlays	2-34
2.5.2.5.5.7.2	Modify NBC Overlays	2-34
2.5.2.5.5.7.3	Delete NBC Overlays	
2.5.2.5.5.7.4	Store NBC Overlays	
2,5,2,5,5,7,5	Receive NBC Overlays	
2.5.2.5.5.8	Display Engineer (ENG) Overlays	
2.5.2.5.5.8.1	Create Engineer Overlays	
2.5.2.5.5.8.2	Modify Engineer Overlays	
2.5.2.5.5.8.3	Delete Engineer Overlays	
2.5.2.5.5.8.4	Store Engineer Overlays	
2.5.2.5.5.8.5	Receive Engineer Overlays	
2.5.2.5.5.9	Display Army Airspace Command and Control (A2C2) Overlays	
2.5.2.5.5.9.1	Create A2C2 Overlays	
2.5.2.5.5.9.2	Modify Overlays	
2.5.2.5.5.9.3	Receive A2C2 Overlays	
2.5.2.5.5.9.4	Delete A2C2 Overlays	
2.5.2.5.5.9.5	Store A2C2 Overlays	
2.5.2.5.5.10	Display Signal (SIG) Overlays	
2.5.2.5.5.10.1	Create SIG Overlays	
2.5.2.5.5.10.2	Modify SIG Overlays	
2.5,2.5.5.10.3	Delete SIG Overlays	
2.5.2.5.5.10.4	·	
2.5.2.5.5.10.5	•	
2.5.2.5.5.11	Display Civil Affairs (CA) Overlays	
2.5.2.5.5.11.1	Create CA Overlays	
2.5.2.5.5.11.2	Modify CA Overlays	
2.5.2.5.5.11.3	Receive CA Overlays	
2.5.2.5.5.11.4	Delete CA Overlays	
2.5.2.5.5.11.5	•	
2.5.2.5.5.12	Display Deployment Overlays	
2.5.2.5.5.12.1	Create Deployment Overlays	
2.5.2.5.5.12.2	Modify Deployment Overlays	
2.5.2.5.5.12.3	* * *	
2.5.2.5.5.12.4		
2.5.2.5.5.12.5		
2.5.2.5.5.13	Display Movement Overlays	
2.5.2.5.5.13.1	· · · · · · · · · · · · · · · · · · ·	
2.5.2.5.5.13.2	· · · · · · · · · · · · · · · · · · ·	
2.5.2.5.5.13.3	·	
2.5.2.5.5.13.4	•	
2.5.2.5.5.13.5		
2.5.2.5.5.14	Display Military Police (MP) Overlays	
2.5.2.5.5.14.1		
2.5.2.5.5.14.2	· · · · · · · · · · · · · · · · · · ·	
2.5.2.5.5.14.3		
2.5.2.5.5.14.4	· · · · · · · · · · · · · · · · · · ·	
2.5.2.5.5.14.5	•	
2.5.2.5.5.15	Display Base Activity Overlays	

SECTION		<u>PAGE</u>
	2.5.2.5.5.15.1	Create Base Activity Overlays 2-48
	2.5.2.5.5.15.2	Modify Base Activity Overlays 2-48
	2.5.2.5.5.15.3	Receive Base Activity Overlays 2-49
	2.5.2.5.5.15.4	Delete Base Activity Overlays 2-49
	2.5.2.5.5.15.5	Store Base Activity Overlays
	2.5.2.5.6	Perform Overlay Filtering and Query
	2.5.2.5.6.1	Perform Spacial Database Queries
	2.5.2.5.6.2	Query SITMAP Display Environment
	2.5.2.5.6.3	Display Query Results
	2.5.2.5.6.4	Acquire Records by Triggering
	2.5.2.5.6.5	Display Overlays from Multiple Sources 2-51
	2.5.2.6	Create/Edit Graphics Symbols
	2.5.2.7	Manage Standard Graphics Symbol Library 2-52
	2.5.2.8	Display Three Dimensional View of Battlefield
		Change Location of Viewer
	2.5.2.8.1	Change Altitude of Viewer
	2.5.2.8.2	Charles There are the transfer of the transfer
	2.5.2.8.3	Change Chematica of the
	2.5.2.8.4	Change to thou Zhaggarana
	2.5.2.8.5	Change Time of 2 mg 12 m
	2.5.2.8.6	Display Transportation Network
	2.5.2.8.7	Display Major Buildings
	2.5.2.8.8	Display Vegetation
	2.5.2.8.9	Display Hydrography
	2.5.2.8.10	Display Bridges and Tunnels
	2.5.2.8.11	Display Mountain Passes
	2.5.2.8.12	Display Beaches
	2.5.2.8.13	Display Coastlines
	2.5.2.8.14	Display Elevation
	2.5.2.8.15	Display Grid Coordinate
	2.5.2.8.16	Display NBC/Smoke Coverage
	2.5.2.8.17	Print Terrain Visual Display
	2.5.3	Monitor Battlefield Deployments
	2.5.3.1	Receive Subunit Deployment Locations
	2.5.3.2	Receive Own Unit Deployment Locations 2-57
	2.5.3.3	Store Deployment Locations
	2.5.3.4	Add Deployment Locations 2-58
	2.5.3.5	Update Deployment Locations 2-58
	2.5.3.6	Delete Deployment Locations
	2.5.3.7	Query Deployment Locations
	2.5.3.8	Distribute Deployment Locations 2-59
	2.5.3.9	Display Deployment Locations
	2.5.3.10	Print Deployment Locations
SECTION 3	ENEM	Y SITUATION FUNCTIONAL DECOMPOSITION
	3.1	Function name
	3.2	Purpose of Function
	3.3	Function Description
	3.4	References
	3.5	Functional Requirements

SECTION		<u>PAC</u>	<u> </u>
	3.5.1	Monitor Enemy Unit Status 3	3-9
	3.5.1.1	Add Enemy Unit Data	
	3.5.1.2	Store Enemy Unit Data 3-	
	3.5.1.3	Update Enemy Unit Data	
	3.5.1.4	Query Enemy Unit Data	
	3.5.1.5	Display Enemy Unit Data 3-	
	3.5.1.6	Print Enemy Unit Data	
	3.5.1.7	Delete Enemy Unit Data 3-	
	3.5.1.8	Distribute Enemy Unit Data	
	3.5.2	Manage Intelligence Displays	
	3.5.2.1	Collect Information for Commander's INTSUM 3-	
	3.5.2.1.1	Collect Enemy Ground Situation 3-	
	3.5.2.1.2	Collect Enemy Air Situation 3-	
	3.5.2.1.3	Collect Enemy Sea Situation 3-	
	3.5.2.1.4	Maintain Commander's INTSUM 3-	
	3.5.2.1.5	Add New INTSUM Data 3-	
	3.5.2.1.6	Query INTSUM Data 3-	
	3.5.2.1.7	Update INTSUM Data 3-	
	3.5.2.1.8	Delete INTSUM Data 3-	-14
	3.5.2.1.9	Store Commander's INTSUM	
	3.5.2.1.10	Display Commander's INTSUM 3-	
	3.5.2.1.11	Print Commander's INTSUM 3-	
	3.5.2.1.12	Distribute Commander's INTSUM Data	
	3.5.2.2	Collect Information for Enemy Kill Board	
	3.5.2.2.1	Collect Enemy Killed In Action (KIA) Information 3-	
	3.5.2.2.2	Collect Enemy Personnel Wounded In Action (WIA) Information 3-	
	3.5.2.2.3	Collect Enemy Personnel Missing In Action (MIA) Information 3-	
	3.5.2.2.4	Collect Enemy Equipment Destroyed Information 3-	-17
	3.5.2.2.5	Collect Enemy Equipment Damaged Information	-17
	3.5.2.2.6	Update Enemy Status by Reference Data	-17
	3.5.2.2.7	Create Kill Board Charts	-17
	3.5.2.2.8	Display Kill Board Charts 3-	-18
	3.5.2.2.9	Store Kill Board Charts	-18
	3.5.2.2.10	Delete Kill Board Charts	-18
	3.5.2.3	Develop Enemy Appraisals 3-	-18
	3.5.2.3.1	Prepare Force Ratio Worksheets	-19
	3.5.2.3.2	Prepare Enemy Situation Appraisal Overlays 3-	-19
	3.5.2.3.3	Distribute Enemy Appraisals 3-	-19
	3.5.2.3.4	Display Enemy Appraisals 3-	-19
	3.5.2.3.4.1	Display Force Ratio Worksheets	-20
	3.5.2.5.4.2	Display Enemy Appraisal Overlay 3-	
	3.5.2.5.4.3	Display Projected Enemy Activity 3-	-20
	3.5.2.5.4.4	= sopresy = rejection = entered = entered	-20
	3.5.3	+ + · · · · · · · · · · · · · · ·	-2
	3.5.3.1	Create the Current Enemy Situation Overlay 3-	-2
	3.5.3.2		-2
	3.5.3.3		-2
	3.5.3.4	Store the Current Enemy Situation Overlay 3-	-22
	3.5.3.5	Receive Current Enemy Situation Information	-22
	3.5.3.6	Display Enemy Unit Overlay 3-	-22

	1	PAGE
3.5.3.6.1	Display Currency of Enemy Data	3-23
3.5.3.6.2	Display Enemy Combat Effective Strength	
3.5.4	Manage PIR Status	
3.5.4.1	Determine PIRs	3-23
3.5.4.2	Receive PIR Status Reports	3-24
3.5.4.3	Prepare PIR Status Report	3-24
3.5.4.4	Display PIR Status	3-24
3.5.4.5	Store PIR Status	
3.5.4.6	Modify PIR Status	
3.5.4.7	Distribute PIR Status Report	3-25
3.5.4.8	Delete PIR	3-25
3.5.4.9	Print PIR Status	
3.5.4.10	Clear PIR Data Base	3-26
3.5.5	Perform Intelligence Preparation of the Battlefield (IPB)	3-26
3.5.5.1	Conduct Battlefield Area Evaluation (BAE)	3-26
3.5.5.1.1	Define the Area of Interest	3-27
3.5.5.1.1.1	Identify Location of Enemy Forces in the Area of Interest	3-27
3.5.5.1.1.2	Identify Location of Enemy Facilities in the Area of Interest	
3.5.5.1.1.3	Analyze Area of Interest NBC Situation	3-28
3.5.5.1.1.4	Analyze Area of Interest Social Situation	
3.5.5.1.1.5	Analyze Area of Interest Economic Situation	3-28
3.5.5.1.1.6	Analyze Area of Interest Political Situation	3-28
3.5.5.1.1.7	Receive and Display BAE of the Area of Interest	3-29
3.5.5.1.1.8	Maintain BAE of the Area of Interest	3-29
3.5.5.1.2	Define the Area of Operations	3-29
3.5.5.1.2.1	Identify Location of Enemy Forces in the Area of Operations	3-29
3.5.5.1.2.2	Identify Location of Enemy Facilities in the Area of Operations	3-30
3.5.5.1.2.3	Analyze Area of Operations NBC Situation	3-30
3.5.5.1.2.4	Analyze Area of Operations Social Situation	
3.5.5.1.2.5	Analyze Area of Operations Economic Situation	
3.5.5.1.2.6	Analyze Area of Operations Political Situation	
3.5.5.1.2.7	Receive/Display BAE of the Area of Operations	3-31
3.5.5.1.2.8	Maintain BAE of the Area of Operations	3-31
3.5.5.2	Conduct Terrain Analysis	
3.5.5.3	Conduct Weather Analysis	
3.5.5.4	Conduct Threat Evaluation	3-32
3.5.5.4.1	Collect Threat Information	
3.5.5.4.1.1	Collect Surveillance Operations Information	3-33
3.5.5.4.1.2	Collect Captured Sources Information	3-33
3.5.5.4.1.3	Collect Human Intelligence (HUMINT) Sources Information	3-33
3.5.5.4.1.4	Collect Counterintelligence (CI) Operations Information	3-33
3.5.5.4.1.5	Collect Personalities Information	3-34 3-34
3.5.5.4.2	Review Current Threat Holdings	
3.5.5.4.3	Analyze Current Enemy Doctrine	3-34 3-34
3.5.5.4.4	Determine Enemy Capabilities	3-34
3.5.5.4.4.1	Determine Offensive Capability	3-35
3.5.5.4.4.2	Determine Defensive Capability	3-35
3.5.5.4.4.3	Determine Enemy Intelligence Collection Capability	
3.5.5.4.4.4 3.5.5.4.4.5	Determine Enemy Vulnerabilities	
3 1 1447	THE PROPERTY OF THE PROPERTY O	

SECTION		<u>P</u> .	<u>AGE</u>
	3.5.5.4.5.1	Determine Enemy Weaknesses	3-36
	3.5.5.4.5.2	Determine Enemy Deception Vulnerability	3-36
	3.5.5.5.6	Develop Enemy Order of Battle	3-37
	3.5.5.5.6.1	Determine Enemy Force Composition	3-37
	3.5.5.5.6.2	Determine Strength of Enemy Force	3-37
	3.5.5.5.6.2.1	Determine Strength of Enemy Committed Force	3-38
	3.5.5.5.6.2.2	Determine Strength of Enemy Reinforcements	3-38
	3.5.5.5.6.2.3	Determine Strength of Enemy Supporting Artillery	3-38
	3.5.5.5.6.2.4		3-38
	3.5.5.5.6.2.5		3-39
	3.5.5.5.6.3	•	3-39
	3.5.5.5.6.4		3-39
	3.5.5.4.6.5		3-39
	3.5.5.4.6.6		3-40
	3.5.5.4.6.7	, ,	3-40
	3.5.5.4.6.8	•	3-40
	3.5.5.4.6.8.1	•	3-40
	3.5.5.4.6.8.2	· · · · · · · · · · · · · · · · · · ·	3-41
	3.5.5.4.6.8.3		3-41
	3.5.5.4.6.8.4	•	3-41
	3.5.5.4.6.9	•	3-41
	3.5.5.4.6.10		3-42
	3.5.5.4.6.11		3-42
	3.5.5.4.7		3-42
	3.5.5.4.7.1	1	3-42
	3.5.5.4.7.2		3-43
	3.5.5.4.7.3	· · · · · · · · · · · · · · · · · · ·	3-43
	3.5.5.4.7.4	•	3-43
	3.5.5.4.7.5		3-44
	3.5.5.4.7.6	<u>-</u>	3-44
	3.5.5.4.7.7		3-44
	3.55.4.7.8	- ·	3-44
	3.5.5.4.8		3-45
	3.5.5.4.8.1		3-45
	3.5.5.4.8.2	Maintain Attack Profile Templates	3-45
	3.5.5.4.8.3	Display Attack Profile Templates	3-45
	3.5.5.4.8.4	Modify Attack Profile Templates	3-46
	3.5.5.4.9	Determine Threat Intentions	3-46
	3.5.5.4.9.1	Determine Threat COAs	3-46
	3.5.5.4.9.1.1		3-46
	3.5.5.4.9.1.2	· · · · · · · · · · · · · · · · · · ·	3-47
	3.5.5.4.9.1.3		3-47
	3.5.5.4.9.1.4	·	3-47
	3.5.5.4.9.1.5		3-48
	3.5.5.4.9.1.6	•	3-48
	3.5.5.4.9.2		3-48
	3.5.5.4.9.3		3-48
	3.5.5.4.9.4	3	3-49
	3.5.5.4.9.5		3-49
	3.5.5.4.9.6	Determine Friendly Tactical Decision Points (DPs)	

	P	AGE
3.5.5.4.9.7	Determine Enemy Impacts on Force Operations	3-50
3.5.5.4.9.8	Maintain Threat Evaluation Data Base	3-50
3.5.5.4.9.9	Trepare Tinear Cort information imparts	3-50
3.5.5.4.9.10	Distribute Threat COA Information/Impacts	3-50
3.5.5.5	Conduct Threat Integration	3-51
3.5.5.5.1	Develop Situation Templates	3-51
3.5.5.5.1.1	Incorporate Weather Restrictions	3-51
3.5.5.5.1.2	Incorporate Terrain Restrictions	3-52
3.5.5.5.1.3	Incorporate Doctrinal Template	3-52
3.5.5.5.1.4	Identify Critical Battlefield Areas	3-52
3.5.5.5.1.5	Provide Target Development Support	3-52
3.5.5.5.1.5.1	Support High-Payoff Target Identification	3-53
3.5.5.5.1.5.2	Support High-Value Target Identification	3-53
3.5.5.5.1.6	Prepare the Situation Template	3-53
3.5.5.5.1.7	Maintain Temporary Situation Files	3-53
3.5.5.5.1.8	Display Situation Template	3-54
3.5.5.5.1.9	Distribute Situation Template	3-54
3.5.5.5.1.10	Delete Situation Template	3-54
3.5.5.5.1.11	Print Situation Template	3-55
3.5.5.5.1.12	Query Situation Template	3-55
3.5.5.5.2	Develop Event Templates	3-55
3.5.5.5.2.1	Determine Named Areas of Interest (NAIs)	3-55
3.5.5.5.2.2	Develop NAI Information	3-55
3.5.5.5.2.3	Determine TAIs	3-55
3.5.5.5.2.4	Develop TAI Information	3-55
3.5.5.5.2.5	Provide Intelligence Collection Plan Support	3-55
3.5.5.5.2.6	Provide Force Reconnaissance/Surveillance (R/S) Plan Support	3-57
3.5.5.5.2.7	Identify Areas to Confirm/Deny COAs	3-57
3.5.5.5.2.8	Develop Events Analysis Matrix	3-57
3.5.5.5.2.9	Identify Opportunity for Exploitation	3-57
3.5.5.5.2.10	Prepare Event Template	3-58
3.5.5.5.2.11	Maintain Event Template Files	3-58
3.5.5.5.2.12	Display Event Template	3-58
3.5.5.5.2.13	Distribute Event Template	3-58
3.5.5.5.2.14	Delete Event Template	3-59
3.5.5.5.2.15	Print Event Template	3-59
3.5.5.5.2.16	Query Event Template	3-59
3.5.5.5.3	Prepare ENSIT for Plans/Orders	3-59
3.5.5.5.3.1	Prepare ENSIT	3-60
3.5.5.5.3.2	Distribute ENSIT	3-60
3.5.5.5.3.3	Update the ENSIT	3-60
3.5.5.5.4	Provide Threat Information to Decision Support Template (DST)/	
	Decision Support Matrix (DSM)	3-61
3.5.5.5.5	Collate/Distribute IPB Products	3-61
3.5.5.5.5.1	Distribute Initial IPB Products	3-61
3.5.5.5.5.2	Distribute IPB Updates	3-61
3.5.5.5.5.3	Print IPB Products	3-62
3.5.5.5.7	Provide On-Line Threat Doctrine	3-62
3.5.6	Incident Reporting	3-62
3.5.6.1	Monitor Radical and Insurgent Data	3-63
	▼	

3.5.6.2 Monitor Neutral Situation Data 3.63 3.5.6.3 Monitor Environmental Data 3.63 3.5.6.4 Monitor and Report on Interactions Between Soldiers and Host Nation Nationals 3.5.6.5 3.5.6.5 Add Spot Report Data 3.64 3.5.6.5.1 Query Spot Report Data 3.64 3.5.6.5.2 Update Spot Report Data 3.65 3.5.6.5.3 Create Selected Spot Reports 3.65 3.5.6.5.3 Create Selected Spot Reports 3.65 SECTION 4 COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION 4.1 4.1 Function Name 4.1 4.2 Purpose of Function 4.1 4.3 Function Description 4.1 4.4 References 4.3 4.5 Functional Requirements 4.3 4.5.1 Receive New Mission Information 4.17 4.5.1.1 Accept New Mission 4.17 4.5.1.1.1 Accept OPLAN/OPORD 4.11 4.5.1.1.1.2 Display OPLAN/OPORD 4.18 4.5.1.1.1.3 Store OPLAN/OPORD 4.18 4.5.1.1.1.4 Store OPLAN/OPORD 4.18 4.5.1.1.1.5 Store OPLAN/OPORD 4.18 4.5.1.1.1.6 Prepare OPLAN/OPORD Receipt Time 4.18 4.5.1.1.1.6 Prepare OPLAN/OPORD Receipt Time 4.18 4.5.1.1.1.6 Store OPLAN/OPORD Receipt Time 4.19 4.5.1.1.1.6 Store OPLAN/OPORD Acknowledgement 4.10 4.5.1.1.1.6 Store OPLAN/OPORD Acknowledgement 4.10 4.5.1.1.1.6 Store OPLAN/OPORD Acknowledgement 4.10 4.5.1.1.2 Accept Warning Order 4.20 4.5.1.1.2 Store Warning Order 4.20 4.5.1.1.3 Accept Commander's Perceived Mission 4.20 4.5.1.1.4 Accept FRAGO 4.20 4.5.1.1.4 Accept FRAGO 4.23 4.5.1.1.4 Accept FRAGO 4.23 4.5.1.1.4 Accept F	SECTION		PAGE
3.5.6.2 Monitor Environmental Data 3.5.6.3 Monitor and Report on Interactions Between Soldiers and Host Nation Nationals 3.5.6.5 Add Spot Report Data 3.6.4 3.5.6.5.1 Query Spot Report Data 3.6.63 3.5.6.5.2 Update Spot Report Data 3.6.5 3.5.6.5.2 Update Spot Report Data 3.6.5 3.5.6.5.3 Create Selected Spot Reports 3.6.5 3.5.6.5.3 Create Selected Spot Reports 3.6.5 SECTION 4 COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION 4.1 4.1 Function Name 4.1 4.2 Purpose of Function 4.1 4.3 Function Description 4.1 4.4 References 4.3 4.5 Functional Requirements 4.3 4.5.1 Receive New Mission Information 4.17 4.5.1.1 Accept New Mission Information 4.17 4.5.1.1.1 Accept New Mission Information 4.17 4.5.1.1.1.2 Display OPLAN/OPORD 4.18 4.5.1.1.1.2 Display OPLAN/OPORD 4.18 4.5.1.1.1.3 Print OPLAN/OPORD 4.18 4.5.1.1.1.5 Store OPLAN/OPORD 4.18 4.5.1.1.1.5 Store OPLAN/OPORD 4.18 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.2 Display Warning Order 4.20 4.5.1.1.2.3 Print Warning Order 4.20 4.5.1.1.2.4 Store Warning Order 4.20 4.5.1.1.2.5 Store OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.2 Display Warning Order 4.20 4.5.1.1.2.3 Print Warning Order 4.20 4.5.1.1.2.4 Store Warning Order 4.20 4.5.1.1.2.5 Store Warning Order 4.20 4.5.1.1.2.6 Distribute OPLAN/OPORD Acknowledgement 4.20 4.5.1.1.2.6 Distribute OPLAN/OPORD Acknowledgement 4.20 4.5.1.1.2.1 Store Warning Order 4.20 4.5.1.1.2.2 Display Warning Order 4.20 4.5.1.1.2.3 Print Warning Order 4.20 4.5.1.1.2.6 Distribute Warning Order 4.20 4.5.1.1.2.6 Distribute Warning Order 4.20 4.5.1.1.2.1 Store Warning Order 4.20 4.5.1.1.2.1 Store Warning Order 4.20 4.5.1.1.2.2 Display FRAGO 4.20 4.5.1.1.3 Print Higher's FRAGO 4.20 4.5.1.1.4 Store Higher's FRAGO 4.20 4.5.1.1.4.5 Prepare FRAGO Acknowledgement 4.22 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.22 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.22 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.22	<u>DECAION</u>		2.62
3.5.6.3 Monitor Entrollmental Data 3.5.6.4 Monitor and Report on Interactions Between Soldiers and Host Nation Nationals 3.5.6.5 Add Spot Report Data			Monitor Neutral Situation Data
Nationals 3-64			Mionitor Environmental Data
3.5.6.5 Add Spot Report Data 3.64 3.5.6.5.1 Query Spot Report Data 3.65 3.5.6.5.2 Update Spot Report Data 3.65 3.5.6.5.2 Update Spot Report Data 3.65 3.5.6.5.3 Create Selected Spot Reports 3.65 3.5.6.5.3 Create Selected Spot Reports 3.65 Section 14 COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION 4-1 4.1 Function Name 4-1 4.2 Purpose of Function 4-1 4.3 Function Description 4-1 4.4 4.3 Function Description 4-1 4.5 Functional Requirements 4.3 4.5 Functional Requirements 4.3 4.5 Functional Requirements 4.5 Functional Requirements 4.5 1.1 Accept New Mission Information 4-17 4.5.1.1 Accept New Mission 4-17 4.5.1.1 Accept OPLAN/OPORD 4-17 4.5.1.1.1 Receive OPLAN/OPORD 4-17 4.5.1.1.1.1 Print OPLAN/OPORD 4-18 4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD 4-18 4.5.1.1.1.6 Display OPLAN/OPORD 4-18 4.5.1.1.1.6 Display OPLAN/OPORD 4-18 4.5.1.1.1.6 Display OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Display OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6 Display OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.6.2 Display Marning Order 4-20 4.5.1.1.2 Accept Warning Order 4-20 4.5.1.1.4 Accept PaAGO		3.5.6.4	Monitor and Report on Interactions between Soldiers and Host Nation 3-63
3.5.6.5.1 Query Spot Report Data 3.6.6 3.5.6.5.2 Update Spot Report Data 3.6.5 3.5.6.5.3 Create Selected Spot Reports 3.6.5 SECTION 4 COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION 4.1 4.1 Function Name 4.1 4.2 Purpose of Function 4.1 4.3 Function Description 4.1 4.4 References 4.3 4.5 Functional Requirements 4.3 4.5 Functional Requirements 4.3 4.5.1 Receive New Mission Information 4.17 4.5.1.1 Accept New Mission 1.1 4.5.1.1 Accept OPLAN/OPORD 4.17 4.5.1.1.1.1 Receive OPLAN/OPORD 4.18 4.5.1.1.1.2 Display OPLAN/OPORD 4.18 4.5.1.1.1.3 Print OPLAN/OPORD 4.18 4.5.1.1.1.5 Store OPLAN/OPORD 4.18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4.19 4.5.1.1.1.6 Distribute OPLAN/OPORD Receipt 4.19 4.5.1.1.1.6 Distribute OPLAN/OPORD Receipt 4.19 4.5.1.1.1.1 Receive OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.2 Display Warning Order 4.20 4.5.1.1.2.1 Receive Warning Order 4.20 4.5.1.1.2.2 Display Warning Order 4.20 4.5.1.1.2.3 Print Warning Order 4.20 4.5.1.1.2.4 Store OPLAN/OPORD Acknowledgement 4.20 4.5.1.1.2.5 Store Warning Order 4.20 4.5.1.1.2.6 Display FRAGO 4.23 4.5.1.1.4 Receive FRAGO 4.23 4.5.1.1.4 Receive FRAGO 4.23 4.5.1.1.4 Store Higher's FRAGO 4.23 4.5.1.1.4.5 Display FRAGO 4.23 4.5.1.1.4.6 Display FRAGO 4.23 4.5.1.1.4.6 Display FRAGO 4.23 4.5.1.1.4.6 Display FRAGO 4.23 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.22 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.24 4.5.1.1.4.6 Display FRAGO 4.23 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.24 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.22 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4.24 4.5.1		0.5.6.5	Nationals
3.5.6.5.2 Update Spot Report Data			Aud Spot Report Data
SECTION 4 COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION			Query Spot Report Data
SECTION 4 COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION 4.1 4.1 Function Name. 4.2 Purpose of Function			Updale Spot Report Data
A.1 Function Name		3.5.6.5.3	Create Selected Spot Reports
A.1 Function Name	SECTION 4	COUR	SE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL
4.1 Function Name 4.2 Purpose of Function 4.3 Function Description 4.1 4.4 References 4.3 4.5 Functional Requirements 4.5 Functional Requirements 4.5.1 Receive New Mission Information 4.5.1 Accept New Mission 4.5.1.1 Accept OPLAN/OPORD 4.7 4.5.1.1.1 Accept OPLAN/OPORD 4.7 4.5.1.1.1.2 Display OPLAN/OPORD 4.17 4.5.1.1.1.3 Print OPLAN/OPORD 4.18 4.5.1.1.1.5 Store OPLAN/OPORD 4.18 4.5.1.1.1.6 Store OPLAN/OPORD 4.18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Cecipt Time 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt Time 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.1.2 Display OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.2 Display Warning Order 4.5.1.1.2 Receive Warning Order 4.5.1.1.2 Display Warning Order 4.5.1.1.2 Store OPLAN/OPORD Acknowledgement 4.19 4.5.1.1.2 Display Warning Order 4.5.1.1.2 Store Warning Order Acknowledgement 4.5.1.1.2 Store Warning Order 4.5.1.1.2 Store Warning Order Acknowledgement 4.5.1.1.2 Store Warning Order Acknowledgement 4.5.1.1.2 Display Warning Order Acknowledgement 4.5.1.1.2 Display Warning Order Acknowledgement 4.5.1.1.2 Display FaraGO 4.5.1.1.2 Display FraaGO 4.5.1.1.2 Display FraaGO 4.5.1.1.3 Print Higher's FraaGO 4.5.1.1.4 Accept FraaGO 4.5.1.1.4 Store Higher's FraaGO 4.5.1.1.4 Store FraaGO Receipt Time 4.5.1.1.4 Store Higher's FraaGO 4.5.1.1.4 Store Higher's	BECTION 4		ECOMPOSITION 4-1
4.2 Purpose of Function 4-1 4.3 Function Description 4-1 4.4 References 4-3 4.5 Functional Requirements 4-3 4.5.1 Receive New Mission Information 4-17 4.5.1.1 Accept New Mission 4-17 4.5.1.1.1 Accept OPLAN/OPORD 4-17 4.5.1.1.1.1 Receive OPLAN/OPORD 4-18 4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order Acknowledgement 4-21 4.5.1.1.2.4 Store			Function Name 4-1
4.3 Function Description			Purpose of Function 4-1
4.4 References 4.5 Functional Requirements 4.5 Receive New Mission Information 4.17 4.5.1.1 Accept New Mission 4.5.1.1 Accept New Mission 4.5.1.1.1 Accept OPLAN/OPORD 4.5.1.1.1.1 Receive OPLAN/OPORD 4.5.1.1.1.2 Display OPLAN/OPORD 4.18 4.5.1.1.1.3 Print OPLAN/OPORD 4.18 4.5.1.1.1.4 Store OPLAN/OPORD 4.18 4.5.1.1.1.5 Store OPLAN/OPORD 4.18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD 4.18 4.5.1.1.1.6 Prepare OPLAN/OPORD Receipt Time 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement 4.5.1.1.1.6.4 Cacept Warning Order 4.5.1.1.1.2 Accept Warning Order 4.5.1.1.2 Accept Warning Order 4.5.1.1.2.1 Receive Warning Order 4.5.1.1.2.2 Display Warning Order 4.5.1.1.2.3 Print Warning Order 4.5.1.1.2.4 Store Warning Order 4.5.1.1.2.5 Store Warning Order 4.5.1.1.2.6 Acknowledge Warning Order 4.5.1.1.2.6 Store Warning Order 4.5.1.1.2.6 Store Warning Order 4.5.1.1.2.6 Store Warning Order 4.5.1.1.2.6 Acknowledge Warning Order 4.5.1.1.2.6 Store Warning Order Acknowledgement 4.5.1.1.2.6 Acknowledge Warning Order 4.5.1.1.2.6 Acknowledge Warning Order 4.5.1.1.2.6 Trepare Warning Order Acknowledgement 4.5.1.1.2.6 Acknowledge Warning Order Acknowledgement 4.5.1.1.2.6 Store Warning Order Acknowledgement 4.5.1.1.2.6 Trepare Warning Order Acknowledgement 4.5.1.1.2.6 Store Warning Order Acknowledgement 4.5.1.1.2.6 Trepare Warning Order Acknowledgement 4.5.1.1.2.6 Store Warning Order Acknowledgement 4.5.1.1.2.6 Trepare Warning Order Acknowledgement 4.5.1.1.2.6 Trepare Warning Order Acknowledgement Mormation 4.5.1.1.1 Accept FRAGO 4.5.1.1.2 Display FRAGO 4.5.1.1.4 Accept FRAGO 4.5.1.1.4 Accept FRAGO 4.5.1.1.4 Store Higher's FRAGO 4.5.1.1.4 Store H			Function Description 4-1
4.5.1 Receive New Mission Information 4-3 4.5.1.1 Accept New Mission 4-17 4.5.1.1.1 Accept OPLAN/OPORD 4-17 4.5.1.1.1.1 Receive OPLAN/OPORD 4-17 4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2.1 Accept Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order Acknowledgement 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement		* * * *	Professional Description
4.5.1.1 Receive New Mission 4-17 4.5.1.1.1 Accept New Mission 4-17 4.5.1.1.1.1 Receive OPLAN/OPORD 4-17 4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2.1 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-20 4.5.1.1.2.5 Store Warning Order Acknowledgement 4-21 4.5.1.1.2.6 Prepare Warning Order Acknowledgement 4-21			Europional Dequirements 4-3
4.5.1.1 Accept New Mission			Paceive New Mission Information
4.5.1.1.1 Accept OPLAN/OPORD 4-17 4.5.1.1.1.1 Receive OPLAN/OPORD 4-18 4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.1.2 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-21 4.5.1.1.2.4 Store Warning Order Receipt Time 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.4 Accept FRAGO <td></td> <td></td> <td></td>			
4.5.1.1.1.1 Receive OPLAN/OPORD 4-17 4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt Time 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2.1 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-21 4.5.1.1.2.4 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order Acknowledgement 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4			Accept OPLAN/OPORD
4.5.1.1.1.2 Display OPLAN/OPORD 4-18 4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2.1 Accept Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-21 4.5.1.1.2.4 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order Acknowledgement 4-22 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.4 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.2			Receive OPLAN/OPORD 4-17
4.5.1.1.1.3 Print OPLAN/OPORD 4-18 4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2.1 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-21 4.5.1.1.2.4 Store Warning Order Receipt Time 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.3 Accept FRAGO 4-23 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.5 Store FRAGO Receipt Tim			Display OPLAN/OPORD 4-18
4.5.1.1.1.4 Store OPLAN/OPORD 4-18 4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-20 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-23 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print			Print OPLAN/OPORD 4-18
4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time 4-18 4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order Acknowledgement 4-22 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement Information 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4 Prepare FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1			Store OPLAN/OPORD 4-18
4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt 4-19 4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.2.6.3 Accept Commander's Perceived Mission 4-23 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-24 4.5.1.1.4.5			Stole OFLANOI OND Receipt Time
4.5.1.1.6.2 Distribute OPLAN/OPORD Acknowledgement 4-19 4.5.1.1.6.3 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-23 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt Time 4-24 4.5.1.1.4.6 Prepare FRAGO Receipt Time 4-24 4.5.1.1.4.6 Distribute FRAGO Acknowledgement 4-24			Acknowledge OPLAN/OPORD Receipt 4-19
4.5.1.1.1.6.2 Store OPLAN/OPORD Acknowledgement Information 4-19 4.5.1.1.2 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.4 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO 8-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt Time 4-24 4.5.1.1.4.6 Prepare FRAGO Receipt Time 4-24 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4-25		4.5.1.1.1.6.1	Piepale OFLANOI ORD Acknowledgement
4.5.1.1.2.1 Accept Warning Order 4-20 4.5.1.1.2.1 Receive Warning Order 4-20 4.5.1.1.2.2 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement 4-22 4.5.1.1.4.6 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-23 4.5.1.1.4.5 Store FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt Time 4-24 4.5.1.1.4.6 Prepare FRAGO Acknowledgement 4-25		4.5.1.1.1.6.2	Distingue of Lawor one regulation
4.5.1.1.2.1 Receive Warning Order		4.5.1.1.1.6.3	Store Of LAIVOI ORD Herriowiedgement amount
4.5.1.1.2.1 Display Warning Order 4-20 4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order Acknowledgement 4-22 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-23 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.1 Distribute FRAGO Acknowledgement 4-25 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25		4.5.1.1.2	Accept waining Order
4.5.1.1.2.3 Print Warning Order 4-20 4.5.1.1.2.4 Store Warning Order 4-21 4.5.1.1.2.5 Store Warning Order Receipt Time 4-21 4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Receive FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25		4.5.1.1.2.1	Receive waiting Order
4.5.1.1.2.3 Store Warning Order			Display walling Order
4.5.1.1.2.5 Store Warning Order Receipt Time			Print warming Order
4.5.1.1.2.6 Acknowledge Warning Order 4-21 4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-23 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			Stole warning Older
4.5.1.1.2.6.1 Prepare Warning Order Acknowledgement 4-22 4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-23 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			Mille Walling Older Receipt Time
4.5.1.1.2.6.2 Distribute Warning Order Acknowledgement 4-22 4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-23 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-24 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			Acknowledge Warning Order
4.5.1.1.2.6.3 Store Warning Order Acknowledgement Information 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-22 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			Prepare Warning Order Acknowledgement 4-22
4.5.1.1.2.0.5 Stole Walning Older Netherlands 4-22 4.5.1.1.3 Accept Commander's Perceived Mission 4-23 4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			Distribute 44 mining Order Freemon reagainment
4.5.1.1.4 Accept FRAGO 4-23 4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			Stole walling Older MeknowiedBernene International
4.5.1.1.4.1 Receive FRAGO 4-23 4.5.1.1.4.2 Display FRAGO 4-23 4.5.1.1.4.3 Print Higher's FRAGO 4-23 4.5.1.1.4.4 Store Higher's FRAGO 4-24 4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-25			
4.5.1.1.4.1 Acknowledgement 4-23 4.5.1.1.4.2 Display FRAGO			
4.5.1.1.4.2 Display TRAGO			Receive TRAGO
4.5.1.1.4.5 Fillt Higher's FRAGO			Display I KAGO
4.5.1.1.4.5 Store FRAGO Receipt Time 4-24 4.5.1.1.4.6 Acknowledge FRAGO Receipt 4-24 4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement 4-24 4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement 4-24			Fille Higher's Toron
4.5.1.1.4.6 Acknowledge FRAGO Receipt			Store FRAGO Receipt Time
4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement			Acknowledge FRAGO Receipt
4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement			Prenare FRAGO Acknowledgement 4-24
4.5.1.1.4.6.3 Store FRAGO Acknowledgement Information			Distribute FRAGO Acknowledgement
		4.5.1.1.4.6.3	Store FRAGO Acknowledgement Information 4-25

SECTION			PAGE
	4.5.1.2	Extract Planning Information	
	4.5.1.2.1	Extract Mission Information	
	4.5.1.2.2	Extract Commander's Intent Information	. 4-26
	4.5.1.2.3	Extract Concept of the Operation	. 4-26
	4.5.1.2.4	Extract Execution Time and Date	
	4.5.1.2.5	Store Extracted Information	
	4.5.1.2.6	Display Extracted Information	
	4.5.1.3	Identify the Decision-Making Process (DMP)	
	4.5.1.3.1	Select the Deliberate Decision-Making Process	
	4.5.1.3.2	Select the Combat Decision-Making Process	
	4.5.1.3.3	Select the Quick Decision-Making Process	
	4.5.1.4	Determine the Planning Schedule	
	4.5.1.4.1	Determine the Planing Schedule for Command-Estimate	
	4.5.1.4.2	Determine the Planning Schedule for the Combat Decision-Making	
		Process	. 4-29
	4.5.1.4.3	Determine the Planning Schedule for the Quick Decision-Making	T-27
	1.5.1.4.5	Process	4-29
	4.5.1.4.4	Display Planning Schedules	
	4.5.1.4.5	Modify Planning Schedules	
	4.5.1.4.6	Print Planning Schedules	
	4.5.1.4.7	Store Planning Schedules	
	4.5.2	Begin Planning Process	
	4.5.2.1	Distribute Planning Information	
	4.5.2.2	Receive Planning Information	
	4.5.2.3	Store Planning Information	
	4.5.3	Manage Facts and Assumptions	4-31
	4.5.3.1	Manage Facts Lists	
	4.5.3.1.1	Receive Facts Lists	
	4.5.3.1.2	Prepare Facts Lists	
	4.5.3.1.3	Display Facts Lists	
	4.5.3.1.4	Store Facts List	
	4.5.3.1.5	Search for Facts Lists	
	4.5.3.1.6	Retrieve Facts Lists	
	4.5.3.1.7	Modify Facts Lists	
	4.5.3.1.8	Distribute Facts Lists	
	4.5.3.1.9	Delete Facts Lists	
	4.5.3.1.10	Print Facts Lists	
	4.5.3.1.11	Clear Facts Data Base	
	4.5.3.2	Manage Assumptions List	
	4.5.3.2.1	Receive Assumptions List	
	4.5.3.2.2	Prepare Assumptions List	
	4.5.3.2.3	Display Assumptions List	
	4.5.3.2.4	Store Assumptions List	
	4.5.3.2.5	Modify Assumptions List	
	4.5.3.2.6		
	4.5.3.2.7	Distribute Assumptions List	
	4.5.3.2.8	Delete Assumptions List	
		Print Assumptions List	4-37
	4.5.3.2.9	Clear Assumptions Data Base	4-37
	4.5.3.2.10	Search for Assumptions List	
	4.5.3.2.11	Retrieve Assumptions List	4-37

	Ľ	AGE
4.5.4	Analyze the Mission	4-38
4.5.4.1	Identify the Enemy's Center of Gravity	
4.5.4.2	Determine Restrictions/Constraints	
4.5.4.2.1	Identify Restrictions	4-39
4.5.4.2.1.1	Receive Restrictions List	4-39
4.5.4.2.1.2	Display Restrictions List	
4.5.4.2.1.3	Prepare Restrictions List	
4.5.4.2.1.3.1	Add Restrictions	
4.5.4.2.1.3.2	Modify Restrictions	
4.5.4.2.1.3.3	Delete Restrictions	
4.5.4.2.1.4	Store Restrictions List	
4.5.4.2.1.5	Distribute Restrictions List	
4.5.4.2.1.6	Clear Restrictions Data Base	
4.5.4.2.2	Identify Constraints	4-41
4.5.4.2.2.1	Receive Constraints List	
4.5.4.2.2.2	Display Constraints List	
4.5.4.2.2.3	Prepare Constraints List	4-42
4.5.4.2.2.3.1	Add Constraints	
4.5.4.2.2.3.2	Modify Constraints	4-42
4.5.4.2.2.3.3	Delete Constraints	4-43
4.5.4.2.2.4	Store Constraints List	4-43
4.5.4.2.2.5	Distribute Constraints List	4-43
4.5.4.2.2.6	Clear Constraints Data Base	
4.5.4.3	Identify Specified Tasks	
4.5.4.3.1	Receive Specified Tasks List	
4.5.4.3.2	Display Specified Tasks List	4-44
4.5.4.3.3	Prepare Specified Tasks List	
4.5.4.3.3.1	Copy Specified Tasks From Order	
4.5.4.3.3.2	Add Specified Tasks	4-45
4.5.4.3.3.3	Modify Specified Tasks	4-45
4.5.4.3.3.4	Delete Specified Tasks	4-45
4.5.4.3.4	Store Specified Tasks List	
4.5.4.3.5	Distribute Specified Tasks List	
4.5.4.3.6	Clear Tasks Data Base	
4.5.4.4	Identify Implied Tasks	
4.5.4.4.1	Receive Implied Tasks List	4-47 4-47
4.5.4.4.2	Display Implied Tasks List	4-47
4.5.4.4.3	Prepare Implied Tasks List	4-47
4.5.4.4.3.1	Add Implied Tasks	4-48
4.5.4.4.3.2	Modify Implied Tasks	4-48
4.5.4.4.3.3	Delete Implied Tasks	4-48
4.5.4.4.4	Store Implied Tasks List	4-48 4-48
4.5.4.4.5	Distribute Implied Tasks List	4-48 4-49
4.5.4.5	Identify Essential Tasks	4-49
4.5.4.5.1	Display Essential Tasks List	4-49 4-49
4.5.4.5.2	Prepare Essential Tasks List	4-49
4.5.4.5.2.1	Designate Essential Tasks	
4.5.4.5.2.2	Add Essential Tasks	
4.5.4.5.2.3	Modify Essential Tasks	4-50

	<u>1</u>	PAGE
4.5.4.5.3	Store Essential Tasks List	4-50
4.5.4.5.4	Distribute Essential Tasks List	
4.5.4.6	Conduct Initial Time Analysis	4-51
4.5.4.6.1	Determine Time Available to Plan	4-51
4.5.4.6.2	Determine Time for Decision-Cycle	4-52
4.5.4.6.3	Determine Unit Movement Schedule	
4.5.4.6.4	Determine Synchronization/Execution Requirements	4-52
4.5.4.6.5	Determine Preparation Requirements	4-52
4.5.4.6.6	Determine Time of Order Issue	4-53
4.5.4.6.7	Prepare Time Analysis	
4.5.4.6.7.1	Receive Other Time Analysis	4-53
4.5.4.6.7.2	Perform PERT Chart Functions	
4.5.4.6.7.3	Perform Gantt Chart Functions	
4.5.4.6.7.4	Display Time Analysis	
4.5.4.6.7.5	Modify Time Analysis	
4.5.4.6.7.6	Delete Time Analysis	
4.5.4.6.7.7	Store Time Analysis	
4.5.4.6.7.8	Clear Time Analysis Data Base	4-55
4.5.4.6.8	Distribute Time Analysis	
4.5.4.7	Issue Restated Mission	
4.5.4.7.1	Formulate Restated Mission	
4.5.4.7.2	Distribute Restated Mission	
4.5.4.7.3	Store Restated Mission	
4.5.4.8	Issue Commander's Planning Guidance	
4.5.4.8.1	Determine the Commander's Planning Guidance	
4.5.4.8.1.1	Issue Commander's Concept of Operation	
4.5.4.8.1.1.1	Issue Guidance on Close Operations	
4.5.4.8.1.1.2	Issue Guidance on Reconnaissance/Security Operations	4-58
4.5.4.8.1.1.3	Issue Guidance on Reserve Operations	
4.5.4.8.1.1.4	Issue Guidance on Deep Operations	
4.5.4.8.1.1.5	Issue Guidance on Rear Operations	
4.5.4.8.1.1.6	Issue Guidance on Command and Control Warfare (C2W) Operations .	
4.5.4.8.1.1.7	Issue Guidance on Main Battle Area (MBA)	
4.5.4.8.1.1.8	Issue Guidance on Psychological Operations (PSYOPS)	
4.5.4.8.1.1.9	Issue Guidance on Risk Assessment	4-60
4.5.4.8.1.1.10 4.5.4.8.1.1.11	Issue Guidance on Desired Effects on Enemy Forces	
4.5.4.8.1.1.12	Issue Guidance on NBC Usage	4-60
4.5.4.8.1.2	Issue Commander's Intent	
4.5.4.8.1.3	Issue Commander's Intelligence Priorities	
4.5.4.8.1.3.1	Issue Guidance on IPB Considerations	
4.5.4.8.1.3.2	Issue Guidance on Enemy COAs to Consider	
4.5.4.8.1.3.3	Issue Guidance on Key or Decisive Terrain	
4.5.4.8.1.4	Manage Sustainment Priorities	
4.5.4.8.1.4.1	Manage Force Manning Priorities	
4.5.4.8.1.4.2	Manage Force Arming Priorities	4-63
4.5.4.8.1.4.3	Manage Fueling Priorities	4-63
4.5.4.8.1.4.4	Manage Force Maintenance Priorities	4-63
4.5.4.8.1.4.5	Manage Force Transportation Priorities	4-64
4.5.4.8.1.4.6	Manage Force Rear Area Support Priorities	
7.5.4.0.1.4.0	Miniago 1 offer from pulbott 1 Housings	

SECTION		•	PAGE
	4.5.4.8.1.4.7	Manage Reconstitution Priorities	4-64
	4.5.4.8.1.5	Issue Commander's Deception Objective	
	4.5.4.8.1.6	Issue Commander's Combat Support Priorities	
	4.5.4.8.1.6.1	Allocate Fire Support Priorities	
	4.5.4.8.1.6.2	Allocate Air Defense Priorities of Support	
	4.5.4.8.1.6.3	Allocate Engineer Priorities of Support	
	4.5.4.8.1.6.4	Allocate IEW Priorities of Support	
	4.5.4.8.1.6.5	Allocate Aviation Priorities of Support	4-66
	4.5.4.8.1.7	Issue Command and Control (C2) Arrangements	4-67
	4.5.4.8.1.8	Issue Commander's Critical Information Requirements (CCIR)	4-67
	4.5.4.8.1.9	Determine the Type of Order	4-67
	4.5.4.8.1.9.1	Use the Fragmentary Order	4-67
	4.5.4.8.1.9.2	Use the Oral Order	4-68
	4.5.4.8.1.9.3	Use the Overlay Order	4-68
	4.5.4.8.1.9.4	Use the Open Blank Order	4-68
	4.5.4.8.1.9.5	Use the Five-Paragraph Written Order	4-68
	4.5.4.8.1.9.6	Decision on the Type of Order	4-69
	4.5.4.8.1.10	Determine the Type of Rehearsal	4-69
	4.5.4.8.1.10.1	Use Confirmation Brief	4-69
	4.5.4.8.1.10.2	Use Map Rehearsal	4-69
	4.5.4.8.1.10.3	Use Sketch-Map Rehearsal	4-70
	4.5.4.8.1.10.4	Use Terrain Model Rehearsal	4-70
	4.5.4.8.1.10.5	Use Key Leader Rehearsal	4-70
	4.5.4.8.1.10.6	Use Full Force Rehearsal	4-70
	4.5.4.8.1.10.7	Decision on Type of Rehearsal	4-7
	4.5.4.8.2	Modify Commander's Planning Guidance	4-7
	4.5.4.8.3	Store Commander's Planning Guidance	4-7
	4.5.4.8.4	Delete Commander's Planning Guidance	4-7
	4.5.4.8.5	Display Commander's Planning Guidance	4-72
	4.5.4.8.6	Print Commander's Planning Guidance	4-72
	4.5.4.8.7	Query Commander's Planning Guidance	4-72
	4.5.4.8.8	Distribute Commander's Planning Guidance	4-72
	4.5.4.9	Prepare/Distribute Warning Order	4-73
	4.5.4.9.1	Prepare/Issue Warning Order	4-73
	4.5.4.9.1.1	Compile Warning Order	4-73
	4.5.4.9.1.1.1	Display Own Warning Order	4-74
	4.5.4.9.1.1.2	Compile Situation Paragraph	4-74
	4.5.4.9.1.1.2.1	Compile Enemy Situation Paragraph	4-74
	4.5.4.9.1.1.2.2	Compile Friendly Situation Paragraph	4-74
	4.5.4.9.1.1.2.2.1	Compile Higher-Echelon Mission Paragraph	4-75
	4.5.4.9.1.1.2.2.2	Prepare Adjacent Unit Mission Paragraph	4-75
	4.5.4.9.1.1.2.2.3	Prepare Forward Unit Mission Paragraph	4-75
	4.5.4.9.1.1.2.2.4		4-76
	4.5.4.9.1.1.2.3	Compile Attachments and Detachments Paragraph	4-76
	4.5.4.9.1.1.3	Compile Mission Paragraph	4-70
	4.5.4.9.1.1.4	Compile Execution Paragraph	4-76
	4.5.4.9.1.1.5	Compile Service Support Paragraph	4-77
	4.5.4.9.1.1.6	Compile Command and Signal Paragraph	4-77
	4.5.4.9.1.1.7	Assign Warning Order Designation	4-78
	454912	Issue Warning Order	4-78

		PAGE
4.5.4.9.1.3	Store Own Warning Order	4-78
4.5.4.9.1.4	Clear Warning Order Data Base	4-78
4.5.4.9.2	Receive Subunit Warning Order Acknowledgement	4-79
4.5.4.10	Conduct Mission Analysis Brief	4-79
4.5.5	Perform Intelligence Preparation of the Battlefield (IPB)	4-79
4.5.6	Develop Staff Estimates	4-79
4.5.6.1	Analyze Relative Combat Power and Situation	4-80
4.5.6.1.1	Analyze Own Force Composition	4-80
4.5.6.1.2	Analyze Own Strengths and Vulnerabilities	4-81
4.5.6.1.2.1	Determine Friendly Committed Forces	4-81
4.5.6.1.2.2	Determine Friendly Reinforcements	4-81
4.5.6.1.2.3	Determine Friendly Supporting Artillery	4-82
4.5.6.1.2.4	Determine Friendly Nuclear Capability	4-82
4.5.6.1.2.5	Determine Friendly Chemical Capability	4-82
4.5.6.1.2.6	Determine Friendly Air Support	4-82
4.5.6.1.2.7	Determine Friendly Vulnerability	4-83
4.5.6.1.2.8	Determine Friendly Force NBC Vulnerabilities	4-83
4.5.6.1.3	Analyze Own Force Disposition	4-83
4.5.6.1.4	Analyze Force Ratios	4-83
4.5.6.1.4.1	Analyze Friendly Weapons versus Enemy Weapons	4-84
4.5.6.1.4.2	Analyze Friendly Fire Support versus Enemy Fire Support	4-84
4.5.6.1.4.3	Analyze Impacts of Deception Operations	4-84
4.5.6.1.4.4	Analyze Impacts of Terrain	4-85
4.5.6.1.4.5	Analyze Impacts of Weather	4-85
4.5.6.1.4.6	Analyze Impacts of Logistics Operations	4-85
4.5.6.1.4.7	Analyze Impacts of PSYOPS	4-85
4.5.6.1.4.8	Analyze Impacts of EW Operations	4-86
4.5.6.1.5	Develop Friendly Order of Battle	4-86
4.5.6.1.6	Maintain Friendly Order of Battle	4-86
4.5.6.1.7	Develop Conclusions on Capabilities	4-86
4.5.6.1.8	Prepare Unit Combat Readiness Report	4-87
4.5.6.1.9	Distribute Unit Combat Readiness Report	4-87
4.5.6.2	Analyze Own Personnel Situation	4-87
4.5.6.2.1	Assess Force Preparedness	4-88
4.5.6.2.2	Determine Feasibility of Operations (Personnel)	4-88
4.5.6.2.3	Determine the Impacts of Operations on Personnel	4-88
4.5.6.2.4	Prepare Personnel Situation Data for Plans	4-88
4.5.6.2.5	Distribute Personnel Situation Data	4-89
4.5.6.2.6	Recommend Priority Intelligence Requirements (PIRs) for Personnel	4.00
	Situation Monitoring	4-89
4.5.6.3	Analyze Own Logistics Situation	4-89
4.5.6.3.1	Develop Mission Support Matrix	4-90
4.5.6.3.2	Develop Reconstitution Support Matrix	4-90
4.5.6.3.3	Prepare Logistics Situation Data for Plans	4-90
4.5.6.3.4	Distribute Logistics Situation Data	4-90
4.5.6.3.5	Recommend PIRs for Logistics Issues	4-91
4.5.6.3.6	Conduct Logistics Preparation of the Battlefield	4-91
4.5.6.3.6.1	Analyze Logistics Support Capabilities	4-91
4.5.6.3.6.2	Determine Feasibility Of Operations (Logistics)	4-91
456363	Determine the Impacts of Operations on Logistics	4-92

SECTION			PAGE
	4.5.6.4	Analyze Own CMO Situation	4-92
	4.5.6.4.1	Acquire CMO Situation Information	4-93
	4.5.6.4.2	Analyze the Influence of CMO	4-93
	4.5.6.4.3	Determine Feasibility of Operations (CMO)	4-93
	4.5.6.4.4	Determine Impact of Operations on CMO	4-93
	4.5.6.4.5	Prepare CMO Situation Data for Plans	4-94
	4.5.6.4.6	Distribute CMO Situation Data	4-94
	4.5.6.4.7	Recommend PIRs for CMO Issues	4-94
	4.5.6.5	Manage Staff Estimates	4-95
	4.5.6.5.1	Receive Staff Estimates	4-95
	4.5.6.5.2	Prepare Staff Estimates	4-95
	4.5.6.5.3	Display Staff Estimates	4-96
	4.5.6.5.4	Store Staff Estimates	4-96
	4.5.6.5.5	Search Staff Estimates	4-96
	4.5.6.5.6	Retrieve Staff Estimates	4-96
	4.5.6.5.7	Modify Staff Estimates	4-97
	4.5.6.5.8	Distribute Staff Estimates	4-97
	4.5.6.5.9	Delete Staff Estimates	4-97
	4.5.6.5.10	Print Staff Estimates	4-97
	4.5.6.5.11	Clear Staff Estimates Data Base	4-97
	4.5.7	Develop COAs	4-98
	4.5.7.1	Review OPLAN and CONPLAN for COA	4-98
	4.5.7.2	Develop Courses of Action	4-98
	4.5.7.2.1	Analyze the Present Situation	4-99
	4.5.7.2.1.1	Analyze Deep Operations	4-99
	4.5.7.2.1.1.1	Acquire Information for Deep Operations Analysis	4-99
	4.5.7.2.1.1.2	Analyze Deep Maneuver Operations	4-99
	4.5.7.2.1.1.3	Analyze Deep Fire Support Operations	4-100
	4.5.7.2.1.1.4	Analyze Deep C3CM Operations	4-100
	4.5.7.2.1.2	Analyze Close Operations	4-100
	4.5.7.2.1.2.1	Acquire Information for Close Operations Analysis	4-100
	4.5.7.2.1.2.2	Analyze Close Operations Engagements	4-101
	4.5.7.2.1.2.3	Analyze Close Operations Combat Requirements	4-101
	4.5.7.2.1.2.4	Analyze Close Operations CSS Requirements	4-101
	4.5.7.2.1.3	Analyze Rear Operations	4-101
	4.5.7.2.1.3.1	Acquire Information for Rear Area Operations Analysis	4-102
	4.5.7.2.1.3.2	Analyze Level I Threat	4-102
	4.5.7.2.1.3.3	Analyze Level II Threat	4-102
	4.5.7.2.1.3.4	Analyze Level III Threat	4-102
	4.5.7.2.1.4	Analyze Initial Array of Forces	4-103
	4.5.7.2.1.4.1	Determine Feasible Operations	4-103
	4.5.7.2.1.4.2	Determine the Proposed FEBA	4-103
	4.5.7.2.1.5	Prepare Tactical Situation Analysis Data	4-103
	4.5.7.2.1.6	Distribute Tactical Situation Analysis Data	4-104
	4.5.7.2.2	Develop the Scheme of Maneuver	4-104
	4.5.7.2.2.1	Address Deep Operations	4-104
	4.5.7.2.2.2	Address Close Operations	4-104
	4.5.7.2.2.3	Address Rear Operations	4-105
	4.5.7.2.2.4	Address Security Operations	4-105
	457225	Address Reserve Operations	4-105

		IAGE
4.5.7.2.2.6	Address NBC Operations	4-105
4.5.7.2.2.7	Determine Force Requirements for COA	4-106
4.5.7.2.2.7.1	Analyze Force Requirements vs Capabilities	
4.5.7.2.2.7.2	Determine Combat Force Requirements	4-106
	Determine CS Force Requirements	4-107
4.5.7.2.2.7.3	Determine CS Force Requirements	4-107
4.5.7.2.2.7.4	Address Probable Enemy COAs	4-107
4.5.7.2.2.8		4-108
4.5.7.2.2.9	Develop the Deception Story	4-108
4.5.7.2.2.10	Determine Tasks	4-108
4.5.7.2.2.11	Array Main and Supporting Efforts	4-100
4.5.7.2.2.12	Group Forces into Sub-Elements	
4.5.7.2.2.13	Address SOF Employment	
4.5.7.2.2.14	Address PSYOPS Employment	
4.5.7.2.3	Incorporate Control Measures	
4.5.7.2.3.1	Incorporate Maneuver Control Measures	
4.5.7.2.3.2	Incorporate Fire Support Control Measures	
4.5.7.2.3.3	Incorporate C2 Control Measures	
4.5.7.2.3.3.1	Determine Systems and Means of C2	
4.5.7.2.3.3.2	Allocate Subordinate HQ Unit Control	
4.5.7.3	Prepare COA Statements and Sketches	
4.5.7.3.1	Prepare COA Statement	
4.5.7.3.1.1	Prepare COA Purpose of the Operation	4-112
4.5.7.3.1.2	Prepare COA Force's Main Effort	
4.5.7.3.1.3	Prepare COA Scheme of Maneuver	4-112
4.5.7.3.1.4	Prepare COA Supporting Effort	4-113
4.5.7.3.1.5	Prepare COA Army Operations Imperatives	4-113
4.5.7.3.1.6	Prepare COA NBC Usage	4-113
4.5.7.3.1.7	Maintain COA Statement	4-113
4.5.7.3.2	Prepare COA Sketch	4-114
4.5.7.3.2.1	Depict Objectives and the Main Effort	4-114
4.5.7.3.2.2	Depict EAs and BPs	4-114
4.5.7.3.2.3	Depict AAs	4-11 ⁴
4.5.7.3.2.4	Depict Axes of Advance and Attack	
4.5.7.3.2.5	Depict Control Measures	
4.5.7.3.2.6	Depict Coordination Lines	
4.5.7.3.2.7	Depict Phase Lines	
4.5.7.3.2.8	Depict Enemy Templates	4-11
4.5.7.3.2.9	Maintain COA Sketch	
4.5.7.4	Obtain the Commander's Approval of COAs	
4.5.8	Analyze and Compare COAs	
4.5.8.1	List Critical Events	
4.5.8.1.1	Prepare Critical Events List	
4.5.8.1.2	Display Critical Events List	
4.5.8.1.3	Store Critical Events List	
4.5.8.1.4	Search Critical Events List	
4.5.8.1.5	Retrieve Critical Events List	
4.5.8.1.6	Modify Critical Events List	4-11
4.5.8.1.7	Delete Critical Events List	
4.5.8.1.8	Print Critical Events List	4-11
4.5.8.1.9	Clear Critical Events Lists From Data Base	4-11

<u>SECTION</u>			PAGE
	4.5.8.2	List Decision Points	4-119
	4.5.8.2.1	Prepare Decision Points List	4-120
	4.5.8.2.2	Display Decision Points List	4-120
	4.5.8.2.3	Store Decision Points List	4-120
	4.5.8.2.4	Search Decision Points List	4-120
	4.5.8.2.5	Retrieve Decision Points List	4-121
	4.5.8.2.6	Modify Decision Points List	4-121
	4.5.8.2.7	Delete Decision Points List	4-121
	4.5.8.2.8	Print Decision Points List	4-121
	4.5.8.2.9	Clear Decision Points Lists From Data Base	4-122
	4.5.8.3	List Significant Factors	4-122
	4.5.8.3.1	List Terrain Factors	4-122
	4.5.8.3.2	List Weather Factors	4-122
	4.5.8.3.3	List Known Enemy Activity Factors	4-123
	4.5.8.3.4	List Mission Time-Phasing Factors	
	4.5.8.3.5	List Force Status Factors	4-123
	4.5.8.3.6	List Future Operations Factors	
	4.5.8.3.7	List NBC Employment Factors	4-124
	4.5.8.3.8	List Force Sustainment Factors	4-124
	4.5.8.3.9	Maintain Factors List	4-124
	4.5.8.4	Perform War Gaming	
	4.5.8.4.1	Select the Method of War Gaming	
	4.5.8.4.1.1	Select Avenue-in-Depth Technique	4-125
	4.5.8.4.1.2	Select Belt Technique	
	4.5.8.4.1.2.1	War Game Initial Contact (FEBA)	
	4.5.8.4.1.2.2	War Game Passage of Reserves	
	4.5.8.4.1.2.3	War Game Counterattack	
	4.5.8.4.1.2.4	War Game Force Exploitation	
	4.5.8.4.1.2.5	War Game Force Pursuit	
	4.5.8.4.1.2.6	War Game Initial Contact (FLOT)	
	4.5.8.4.1.3	Select Box Technique	
	4.5.8.4.1.4	Select Adversarial Technique	
	4.5.8.4.2	Conduct and Record War Gaming Results	
	4.5.8.4.2.1	Select the COA to be War Gamed	
	4.5.8.4.2.2	Record Results Using Narrative	
	4.5.8.4.2.3	Display Results of Narrative	4-129
	4.5.8.4.2.4	Record Results Using Sketch-Notes	4-129
	4.5.8.4.2.5	Display Results of Sketch-Notes	
	4.5.8.4.2.6	Record Results Using Synchronization Matrix	
	4.5.8.4.2.7	Display Results of Synchronization Matrix	
	4.5.8.4.3	Analyze War Gaming Results	
	4.5.8.4.3.1	Modify or Refine COA	
	4.5.8.4.3.2	Summarize COA Advantages	
	4.5.8.4.3.3	Summarize COA Disadvantages	
	4.5.8.4.3.4	Verify/Identify NAIs and TAIs	
	4.5.8.4.3.5	Verify/Identify Critical Events	
	4.5.8.4.3.6	Verify/Identify Decision Points	
	4.5.8.4.3.7	Determine Combat Multipliers	
	4.5.8.4.3.8	Determine Expected Attrition Rates	
	4.5.8.4.3.9	Identify Possible COA Options	

		PAGE
4.5.8.4.3.10	Identify Possible COA Branches	4-133
4.5.8.4.3.11	Determine Operations Phasing	4-133
4.5.8.4.3.12	Identify CCIRs for Current Operations	4-133
4.5.8.4.3.13	Project CCIR into Future Operations	4-134
4.5.8.5	Compare COA Analysis Results	4-134
4.5.8.5.1	Summarize COA Advantages	4-134
4.5.8.5.2	Summarize COA Disadvantages	4-135
4.5.8.5.3	Isolate Significant COA Factors	4-135
4.5.8.5.4	Review the Concept of the Operation	4-135
4.5.8.5.5	Rank Order COAs, Best to Worst	
4.5.8.5.6	Select COA Which Best Supports Concept of the Operation	4-136
4.5.8.6	Provide Recommendations on Force COAs	4-136
4.5.8.6.1	Request BOS Assessments	4-136
4.5.8.6.2	Receive BOS Assessments	4-136
	Incorporate BOS Recommendations	
4.5.8.6.3	Conduct Risk Analysis/Assessment	
4.5.9	Identify Mission Risks/Hazards	4-137
4.5.9.1	Identify Risks of Mission Failure	
4.5.9.1.1		
4.5.9.1.2	Identify Risks of Indecisive Results	4-138
4.5.9.1.3	Identify Understanding of the Mission	4-138
4.5.9.1.4	Identify Status of Combat Preparation	
	Identify METT-T Risks	
4.5.9.1.6	Develop METT-T Risks Assessment	
4.5.9.2	Assess Possible Loss/Cost	
4.5.9.2.1	Assess Current COA Impacts	
4.5.9.2.1.1	Assess Personnel Loss Impacts	
4.5.9.2.1.2	Assess Equipment Loss Impacts	
4.5.9.2.1.3	Assess Future Operations Impacts	
4.5.9.2.2	Develop Control Measures	
4.5.9.3	Mark Battlefield Hazards	4-141
4.5.9.3.1	Develop Land Navigation Measures	
4.5.9.3.2	Develop Movement Control Measures	4-142
4.5.9.3.3 4.5.9.3.4	Develop Battle Tracking Measures	
4.5.9.3.5	Prepare Combat Identification Markings	
4.5.9.4	Integrate Fratricide Countermeasures	4-142
	Distribute Fratricide Countermeasures	4-143
4.5.9.5	Select a COA	4-143
4.5.10 4.5.10.1	Brief the Selected COAs	4-143
	Receive Enemy/IPB Updates	4-144
4.5.10.1.1	Brief the Force Intent	4-144
4.5.10.1.2	Brief the Force Mission	4-144
4.5.10.1.3 4.5.10.1.4	Brief Own Force Status	4-144
4.5.10.1.5	Brief Updates to the IPB	4-145
4.5.10.1.5.1	Brief the Most Probable Threat COA	4-145
4.5.10.1.5.2	Brief the Most Dangerous Threat COA	4-145
4.5.10.1.6	Brief the Selected Force COAs	4-145
4.5.10.1.7	Brief Planning Assumptions	4-146
4.5.10.1.8	Brief the Consolidated Decision Support Matrix	4-146
4.5.10.2	Brief the War Game and Risk Analysis Results	4-146
4.J.1U.Z	Duct me war came and grav than has require	

SECTION			<u>PAGE</u>
	4.5.10.3	Brief COA Recommendations	4-146
	4.5.10.3.1	Recommend COA Based on War Gaming	
	4.5.10.3.2	Recommend COA Based on BOS Assessments	
	4.5.10.4	Commander's COA Selection	
	4.5.10.5	Prepare Additional Commander's Guidance	
	4.5.10.6	Issue Additional Commander's Guidance	
	4.5.10.7	Update Task Organization	
	4.5.11	Develop Decision Support Template (DST)	
	4.5.11.1	Incorporate CCIR	
	4.5.11.2	Incorporate IPB DST	
	4.5.11.3	Incorporate Mission Times	
	4.5.11.3.1	Receive Time Phase Lines (TPL)	
	4.5.11.3.2	Receive Mission Time Estimates	
	4.5.11.4	Incorporate Decision Points	
	4.5.11.5	Incorporate Critical Events	
	4.5.11.6	Incorporate the Scheme of Maneuver	
	4.5.11.7	Incorporate Control Measures	
	4.5.11.8	Incorporate the Friendly Situation	
	4.5.11.9	Plot the DST to the Situation Map	
	4.5.11.10	Maintain the DST	
	4.5.11.11	Distribute the DST	
	4.5.11.12	Print DST Support Products	4-152
	4.5.12	Develop DST Synchronization (DST-SYNCH) Matrix	
	4.5.12.1	Access Synchronization Matrix	4-152
	4.5.12.2	Access DST	
	4.5.12.3	Access Force Plan Information	4-153
	4.5.12.4	Fuse Synchronization Matrix/Plan/DST	4-153
	4.5.12.5	Depict Decisions at Each TPL	
	4.5.12.6	Depict CCIRs for Mission Monitor	
	4.5.12.7	Plot the DST-SYNCH Matrix to the Situation Map	
	4.5.12.7.1	Display the DST-SYNCH Matrix	
	4.5.12.8	Maintain the DST-SYNCH Matrix	
	4.5.12.8.1	Update the DST-SYNCH Matrix	
	4.5.12.9	Distribute the DST-SYNCH Matrix	
	4.5.12.10	Print DST-SYNCH Matrix Products	
	4.5.13	Provide On-Line Force Doctrine	4-155
SECTION 5	OPL	AN/OPORD/ANNEX GENERATOR FUNCTIONAL DECOMPOSITION	5-1
	5.1	Function Name	5_1
	5.2	Purpose of Function	
	5.3	Function Description	
	5.4	References	
	5.5	Functional Requirements	
	5.5.1	Prepare/Issue OPLAN/OPORD	
	5.5.1.1	Prepare Input to an OPLAN/OPORD	
	5.5.1.1	Prepare Force Task Organization Input	
	5.5.1.1.1	Prepare Graphical Force Task Organization	
	5.5.1.1.1.2	Prepare Textual Force Task Organization	
	5.5.1.1.1.3	Display Graphical Force Task Organization	
	2.2.1.1.1.2	Display Chapilical I Olec Task Cigalification	5-0

	<u>PA</u>	<u>GE</u>
5.5.1.1.1.4	Request Force Task Organization Input	5-8
5.5.1.1.1.5		5-8
5.5.1.1.1.6		5-9
5.5.1.1.2		5-9
5.5.1.1.2.1		5-9
5.5.1.1.2.2		-10
5.5.1.1.2.3		-10
5.5.1.1.2.4		-10
5.5.1.1.3	Prepare Operations Input 5	-10
5.5.1.1.3.1		-11
5.5.1.1.3.2		-11
5.5.1.1.3.3	Prepare Operations Annexes 5	-11
5.5.1.1.3.4		-11
5.5.1.1.4		-12
5.5.1.1.4.1	Request Engineer Input	-12
5.5.1.1.4.2	Receive Engineer Input	-12
5.5.1.1.4.3		-13
5.5.1.1.4.4	Prepare Engineer Overlays	-13
5.5.1.1.5		-13
5.5.1.1.5.1		-13
5.5.1.1.5.2	Receive Aviation Input	-14
5.5.1.1.5.3	Prepare Aviation Annexes	-14
5.5.1.1.5.4	Prepare Aviation Overlays	-14
5.5.1.1.6	Prepare Fire Support Input	-14
5.5.1.1.6.1	Reducer I no Support Imput	-15
5.5.1.1.6.2	Receive The Support Input	-15
5.5.1.1.6.3	Tiepaie The Support Amieres	-15
5.5.1.1.6.4	Troparo Tito Bupport G. Grand's T.	-15
5.5.1.1.7	Trepare 7th Defense input	-16
5.5.1.1.7.1	Reduce in Beleine input	-16
5.5.1.1.7.2	1000010 1m Bolombo mparitiritiritiritiritiri	5-16
5.5.1.1.7.3	Trepare 1111 Botonse 111110000 111111111111111111111111111	5-17
5.5.1.1.7.4	Tiepake III Belense e verlage	-17
5.5.1.1.8	Ticpate 71202 input	5-17 5-17
5.5.1.1.8.1	Request 112C2 Input	5-17
5.5.1.1.8.2	Receive 1222 Input	i-18
5.5.1.1.8.3	Tropino 11202 Timmonos 11111111111111111111111111111111111	i-18
5.5.1.1.8.4	110paio 11202 0 1011ajo 1111111111111111111111111111111111	i-18
5.5.1.1.9	Tiepato 2 W Impat	i-18
5.5.1.1.9.1	reduces 2 input to the terms of the terms	i-19
5.5.1.1.9.2	Receive By Impat	5-19
5.5.1.1.9.3	Tiopato 2 to Timeston Titte Ti	5-19
5.5.1.1.9.4	Tropus 2.1. C. Carago	5-20
5.5.1.1.10	Tioparo organization	5-20
5.5.1.1.10.1	Troduction or Brian Impart 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5-20
5.5.1.1.10.2	1000110 bigina input titti titti titti titti	5-20
5.5.1.1.10.3	ropare organic random vivi vivi vivi	5-21
5.5.1.1.10.4	110paro biginar Greatajo	5-21
5.5.1.1.11	Request OPSEC Input	

SECTION		·	AGE
	5.5.1.1.11.2	Receive OPSEC Input	5-21
	5.5.1.1.11.3	Prepare OPSEC Annex	5-22
	5.5.1.1.12	Prepare Deception Input	
	5.5.1.1.12.1	Request Deception Input	
	5.5.1.1.12.2	Receive Deception Input	5-23
	5.5.1.1.12.3	Prepare Deception Annex	5-23
	5.5.1.1.12.4	Prepare Deception Overlay	
	5.5.1.1.13	Prepare PSYOPS Input	
	5.5.1.1.13.1	Request PSYOPS Input	
	5.5.1.1.13.2	Receive PSYOPS Input	5-24
	5.5.1.1.13.3	Prepare PSYOPS Annexes	5-24
	5.5.1.1.13.4	Prepare PSYOPS Overlays	
	5.5.1.1.14	Prepare NBC Input	
	5.5.1.1.14.1	Request NBC Input	
	5.5.1.1.14.2	Receive NBC Input	5-25
	5.5.1.1.14.3	Prepare NBC Annexes	5-26
	5.5.1.1.14.4	Prepare NBC Overlays	
	5.5.1.1.15	Prepare PM Input	
	5.5.1.1.15.1	Request PM Input	
	5.5.1.1.15.2	Receive PM Input	5-27
	5.5.1.1.15.3	Prepare PM Annexes	5-27
	5.5.1.1.15.4	Prepare PM Overlays	
	5.5.1.1.16	Prepare Rear Operations Input	
	5.5.1.1.16.1	Request Rear Operations Input	5-28
	5.5.1.1.16.2	Receive Rear Operations Input	5-28
	5.5.1.1.16.3	Prepare Rear Operations Annex	5-28
	5.5.1.1.16.4	Prepare Rear Operations Overlay	5-28
	5.5.1.1.17	Prepare Service Support Input	
	5.5.1.1.17.1	Request Service Support Input	
	5.5.1.1.17.2	Receive Service Support Input	5-29
	5.5.1.1.17.3	Prepare Service Support Annexes	
	5.5.1.1.17.4	Prepare Service Support Overlays	
	5.5.1.1.18	Prepare Highway Regulation Input	
	5.5.1.1.18.1	Request Highway Regulation Input	
	5.5.1.1.18.2	Receive Highway Regulation Input	5-30
	5.5.1.1.18.3	Prepare Highway Regulation Annex	
	5.5.1.1.18.4	Prepare Highway Regulation Overlay	
	5.5.1.1.19	Prepare Civil-Affairs Input	
	5.5.1.1.19.1	Request Civil-Affairs Input	
	5.5.1.1.19.2	Receive Civil-Affairs Input	5-32
	5.5.1.1.19.3	Prepare Civil-Affairs Annex	
	5.5.1.1.19.4	Prepare Civil-Affairs Overlay	
	5.5.1.1.20	Prepare ROE Input	
	5.5.1.1.20.1	Request ROE Input	
	5.5.1.1.20.2	Receive ROE Input	5-33
	5.5.1.1.20.3	Prepare ROE Annex	
	5.5.1.1.21	Prepare Lodgement Operations Input	
	5.5.1.1.21.1	Request Lodgement Operations Input	
	5.5.1.1.21.2	Receive Lodgement Operations Input	5-34
	5 5 1.1.21.3	Prepare Lodgement Operations Annex	5-34

	<u>1</u>	PAGE
5.5.1.1.21.4	Prepare Lodgement Operations Overlay	5-35
5.5.1.1.22	Prepare Air Movement Input	5-35
5.5.1.1.22.1	Request Air Movement Input	
5.5.1.1.22.2	Receive Air Movement Input	
5.5.1.1.22.3	Prepare Air Movement Annex	
5.5.1.1.22.4	Prepare Air Movement Overlay	
5.5.1.2	Compile the OPLAN	
	Compile/Develop the Force Task Organization	
5.5.1.2.1	Compile/Develop the Situation Paragraph	
5.5.1.2.2	Compile/Develop the Mission Paragraph	
5.5.1.2.3	Compile/Develop the Execution Paragraph	
5.5.1.2.4	Compile/Develop the Service Support Paragraph	
5.5.1.2.5		
5.5.1.2.6	Compile/Develop the Command and Signal Paragraph	
5.5.1.2.7	Incorporate OPLAN Annexes	
5.5.1.2.8	Incorporate OPLAN Overlays	
5.5.1.2.9	Assign a Designation to the OPLAN	5-39
5.5.1.3	Approve the OPLAN	
5.5.1.3.1	Brief the OPLAN	
5.5.1.3.2	Receive Commander's OPLAN Approval	
5.5.1.4	Store the OPLAN	
5.5.1.5	Distribute the OPLAN	
5.5.1.5.1	Issue the OPLAN	5-40
5.5.1.5.2	Receive OPLAN Acknowledgement	
5.5.1.6	Print the OPLAN/OPORD	
5.5.1.7	Display the OPLAN/OPORD	
5.5.1.8	Select an OPLAN	
5.5.1.8.1	Access a Stored OPLAN/OPORD	
5.5.1.8.2	Select an OPLAN/OPORD	
5.5.1.9	Prepare the OPORD	
5.5.1.9.1	Eliminate OPLAN Assumptions	
5.5.1.9.2	Input Real Times to the OPLAN	5-43
5.5.1.9.3	Modify the OPLAN	5-43
5.5.1.10	Approve the OPORD	5-43
5.5.1.10.1	Brief the OPORD	
5.5.1.10.2	Receive Commander's OPORD Approval	
5.5.1.11	Issue the OPORD	
5.5.1.11.1	Distribute the OPORD	5-44
5.5.1.11.1.1	Inform Higher Headquarters of the New OPORD	
5.5.1.11.1.2	Inform Adjacent Headquarters of the New OPORD	5-45
5.5.1.11.1.3	Issue the New OPLAN/OPORD	5-45
5.5.1.11.2	Receive OPORD Acknowledgement	5-45
5.5.1.12	Store the OPORD	5-46
5.5.1.13	Delete an OPLAN/OPORD	5-46
5.5.2	Prepare/Issue an Oral Order	5-46
5.5.3	Prepare/Issue a FRAGO	5-46
5.5.3.1	Prepare Change in the Situation Paragraph	5-47
5.5.3.2	Prepare Change in the Force Mission Paragraph	5-47
5.5.3.3	Prepare Change in the Commander's Intent Paragraph	5-47
5.5.3.4	Prepare Change in the Concept of the Operation Paragraph	5-48
5.5.3.5	Prepare Change to the Force Task Organization	5-48

SECTION		<u>PA</u>	AGE
	5.5.3.6	Prepare New Force Taskings	5-48
	5.5.3.7	Prepare Change in Control Measures	5-48
	5.5.3.8	Compact and 2 to 100 to	5-49
	5.5.3.9	Assign a Designation to the FRAGO	5-49
	5.5.3.10	Approve the FRAGO	5-49
	5.5.3.10.1	Brief the FRAGO	5-50
	5.5.3.10.2		5-50
	5.5.3.11		5-50
	5.5.3.12		5-50
	5.5.3.13	Issue FRAGOs	5-51
	5.5.3.14	Store FRAGOs	5-51
	5.5.3.15	Print FRAGOs	
	5.5.3.16	Display FRAGOs	
	5.5.3.17	Develop a FRAGO Summary List	5-52
	5.5.3.17.1	Receive a FRAGO Summary List	5-52
	5.5.3.17.1	Prepare a FRAGO Summary	5-52
	5.5.3.17.3	Modify a FRAGO Summary	
		Store a FRAGO Summary	5-53
	5.5.3.17.4	Print a FRAGO Summary List	5-53
	5.5.3.17.5	Print a FRAGO Summary List	5 53
	5.5.3.17.6	Delete a FRAGO Summary	5-52
	5.5.3.17.7	Display the FRAGO Summary List	5-54
	5.5.3.17.8	Distribute the FRAGO Summary List	
	5.5.3.18	20.000 411.000 11111111111111111111111111	5-54
	5.5.4	Prepare/Issue a Free-Text Order	5-54
	5.5.4.1	Create the Free-Text Order	
	5.5.4.2	Issue the Free-Text Order	5-5:
SECTION 6	TER	RAIN EVALUATION FUNCTIONAL DECOMPOSITION	6-3
	6.1	Function Name	6-3
	6.2	Purpose of Function	
	6.3	Function Description	
	6.4	References	
	6.5	Functional Requirements	6-2
	6.5.1	Collect Terrain Information	
	6.5.1.1	Identify Gaps in Terrain Data	6-4
	6.5.1.2	Request Terrain/Topographic Team Data	6-4
	6.5.1.3	Receive Terrain/Topographic Team Data	6-4
	6.5.2	Assemble Existing Terrain Information	6-:
	6.5.2.1	Assemble Vegetation Data	6-:
	6.5.2.2	Assemble Surface Transportation/Traffic Data	6-:
	6.5.2.3	Assemble Soil/Drainage Data	6-6
	6.5.2.4	Assemble Terrain Slope Data	6-6
	6.5.2.5	Assemble Obstacle Data	6-0
			6-6
	6.5.2.6	Assemble Cross-Country Movement Data	6-
	6.5.2.7	Assemble Groundwater Data	6-
	6.5.2.8	Assemble Cover & Concealment Data	
	6.5.2.9	Assemble NBC Hazard Data	6-
	6.5.3	Analyze Area Obstacles/Barriers	6-
	6.5.4	Analyze Area Key Terrain	6-8

<u>SECTION</u>		PAGI
	6.5.4.1	Identify Possible Enemy Objective 6-
	6.5.4.2	Determine Friendly Objectives 6-8
	6.5.5	Analyze Area Lines Of Communications (LOC) 6-
	6.5.6	Analyze Area Avenues of Approach 6-
	6.5.6.1	Determine Land Approaches 6-
	6.5.6.2	Determine Air Approaches 6-10
	6.5.6.3	Analyze Potential to Support Maneuver 6-10
	6.5.6.4	Analyze Access to Terrain 6-10
	6.5.6.5	Analyze Adjacent Mobility Corridors 6-10
	6.5.6.6	Analyze Degree of Canalization 6-1
	6.5.7	Analyze Area Cover & Concealment 6-1
	6.5.8	Analyze Area Observation 6-1
	6.5.8.1	Perform Observation Post (OP)/Listening Post (LP) LOS Analysis 6-12
	6.5.8.2	Perform Sensor System LOS Analysis 6-12
	6.5.9	Perform Weapons LOS Analysis
	6.5.9.1	Request Weapons Capability Data
	6.5.9.2	Receive Weapons Capability Data
	6.5.9.3	Analyze Weapons LOS
	6.5.10	Determine Impacts on Force Operations 6-1:
	6.5.11	Determine Impacts on Force Operations
	6.5.12	Receive/Develop Terrain Overlays
		Receive/Develop Combined Obstacle Overlays 6-14
	6.5.12.1	,
	6.5.12.2 6.5.12.3	Develop Terrain Factors Matrix
		Develop Avenue of Approach Overlays 6-1:
	6.5.12.4	The state of the s
	6.5.12.5	20,010p 2020 0,000000000000000000000000000000
	6.5.12.6	
	6.5.12.7	
	6.5.12.8	
	6.5.12.9	
	6.5.12.10	
	6.5.12.11	
	6.5.12.12	
	6.5.12.13	· · · · · · · · · · · · · · · · · ·
	6.5.12.14	
	6.5.12.15	
	6.5.12.16	Dovelop 11DO Italian Overlay o
	6.5.13	2 toping, 2 toping 1
	6.5.14	
	6.5.15	2 ************************************
	6.5.16	Print Terrain Analysis Data
	6.5.17	Delete Terrain Analysis Data
SECTION 7	SUP	PLIES AND EQUIPMENT FUNCTIONAL DECOMPOSITION 7-
	7.1	Function name 7-
	7.2	Purpose of Function 7-
	7.3	Function Description
	7.4	References
	7.5	Functional Requirements

<u>SECTION</u>	,		PAGE
	7.5.1	Monitor Critical Logistics Items	7-4
	7.5.1.1	Receive Critical Logistics Items Data	7-4
	7.5.1.2	Add Critical Logistics Items Data	7-4
	7.5.1.3	Query Critical Logistics Items Data	7-5
	7.5.1.4	Modify Critical Logistics Items Data	7-5
	7.5.1.5	Display Critical Logistics Items Reports	7-5
	7.5.1.5.1	Create Critical Logistics Items Chart	7-6
	7.5.1.5.1	Create Critical Items Summary chart	7-6
	7.5.1.5.1.1	Display Critical Logistics Items Charts	7-6
	7.5.1.5.2.1	Display Critical Items Gumball Chart	7-6
	7.5.1.5.2.1	Display Critical Items Subunit Summary Chart	7-7
		• •	7-7
	7.5.1.5.2.3	Display Critical Items Free-Text Chart	7-7
	7.5.1.5.3	Store Critical Logistics Items Charts	7-7 7-7
	7.5.1.5.4	Delete Critical Logistics Items Charts	7-8
	7.5.1.6	Store Critical Logistics Items Data	7-8
	7.5.1.7	Delete Critical Logistics Items Data	
	7.5.1.8	Print Critical Logistics Items Data	7-8
	7.5.1.9	Distribute Critical Logistics Items Data	7-8
	7.5.2	Monitor POMCUS Item Status	7-9
	7.5.2.1	Receive POMCUS Item Status	7-9
	7.5.2.2	Add POMCUS Item Status Data	7-9
	7.5.2.3	Query POMCUS Item Status	7-10
	7.5.2.4	Modify POMCUS Item Status	7-10
	7.5.2.5	Display POMCUS Reports	7-10
	7.5.2.6	Store POMCUS Item Status	7-11
	7.5.2.7	Delete POMCUS Item Status	7-11
	7.5.2.8	Print POMCUS Item Status	7-11
	7.5.2.9	Distribute POMCUS Item Status	7-11
	7.5.3	Monitor Unit Basic Load Information	7-12
	7.5.3.1	Receive Unit Basic Load Information	7-12
	7.5.3.2	Add Unit Basic Load Information	7-12
	7.5.3.3	Query Unit Basic Load Information	7-13
	7.5.3.4	Modify Unit Basic Load Information	7-13
	7.5.3.5	Display Unit Basic Load Reports	7-13
	7.5.3.6	Store Unit Basic Load Information	7-14
	7.5.3.7	Delete Unit Basic Load Information	7-14
	7.5.3.8	Print Unit Basic Load Information	7-14
	7.5.3.9	Distribute Unit Basic Load Information	7-14
	7.5.4	Monitor Logistics and Supply Status	7-15
	7.5.4.1	Receive Logistics and Supply Status	7-15
	7.5.4.2	Manage General Supply/Class I, II, VI Status	7-15
	7.5.4.3	Manage Petroleum, Oils, and Lubricants (POL)/Class III Status	7-16
	7.5.4.4	Manage Construction and Barrier Material/Class IV Status	7-17
	7.5.4.5	Manage Munitions/Class V Status	7-17
	7.5.4.6	Manage Major End Item/Class VII Status	7-18
	7.5.4.7	Manage Medical Supplies/Class VIII Status	7-18
	7.5.4.8	Display Logistics and Supply Status	7-18
	7.5.4.8.1	Create Logistics and Supply Status Report	7-19
	7.5.4.8.2	Modify Logistics and Supply Status Report	7-19
	7.5.4.8.3	Store Logistics and Supply Status Report	7-19

SECTION			PAGE
	7.5.4.8.4	Delete Logistics and Supply Status Report	7-20
	7.5.4.8.5	Distribute Logistics and Supply Status Reports	7-20
	7.5.4.9	Manage Repair Parts/Class IX Status	7-20
	7.5.4.10	Manage Non-Military/Class X and Miscellaneous Supplies Status	
	7.5.4.11	Modify Logistics and Supply Status	
	7.5.4.12	Store Logistics and Supply Status	
	7.5.4.13	Delete Logistics and Supply Status	7-22
	7.5.4.14	Query Logistics and Supply Status	7-22
	7.5.4.15	Print Logistics and Supply Status	7-22
	7.5.4.16	Distribute Logistics and Supply Status	7-22
	7.5.5	Monitor Maintenance Information	
	7.5.5.1	Monitor and Evaluate Maintenance Data	
	7.5.6	Manage the Logistics Data Base	
	7.5.6.1	Manage UIC Logistics User Permissions	7-24
	7.5.6.2	Update Logistics Factors	
	7.5.6.3	Maintain Logistics Validation Table	
CECTION 9	C	ONVOY PLANNING FUNCTIONAL DECOMPOSITION	8-1
SECTION 8	C	JAVOT PLANNING FUNCTIONAL DECOME OSITION	0-1
	8.1	Function Name	8-1
	8.2	Purpose of Function	8-1
	8.3	Function Description	8-1
	8.4	References	8-2
	8.5	Functional Requirements	8-2
	8.5.1	Receive Movement Planning Information	
	8.5.2	Conduct Movement Planning	
	8.5.2.1	Calculate Route Movement Time	
	8.5.2.2	Modify Vehicle Characteristics	8-4
	8.5.2.3	Display Quickest Route	8-5
	8.5.2.4	Identify Routes	
	8.5.2.5	Store Route Information	
	8.5.2.6	Prepare Movement Tables	
	8.5.2.7	Modify Movement Tables	
	8.5.2.8	Store Movement Tables	
	8.5.2.9	Update Movement Limiting Conditions	
	8.5.2.10	Delete Movement Tables	8-7
	8.5.2.11	Clear Movement Tables Data Base	8-7
	8.5.3	Analyze Convoy Movement Plans	
	8.5.4	Prepare Movement Overlays	
	8.5.4.1	Identify Start Points	
	8.5.4.2	Identify Release Points	
	8.5.4.3	Identify Check Points	
	8.5.4.4	Display Routes	
	8.5.4.5	Store Movement Overlay	
	8.5.4.5 8.5.4.6	Delete Movement Overlay	
	8.5.4.6 8.5.5	Prepare Movement Orders	
	8.5.5 8.5.6	Issue Movement Order	8-10
	8.5.0 8.5.7	Modify Movement Order	8-10
	8.5.7 8.5.8	Store Movement Order	8-10
			8-10
	8.5.9	Print Movement Order	3-10

SECTION		<u>P</u>	<u>AGE</u>
	8.5.10 8.5.11	Display Movement Order Delete Movement Order	8-11 8-11
SECTION 9	PER	SONNEL RESOURCES FUNCTIONAL DECOMPOSITION	9-1
	9.1	Function Name	9-1
	9.2	Purpose of Function	9-1
	9.3	Function Description	9-1
	9.4	References	9-2
	9.5	Functional Requirements	9-3
	9.5.1	Monitor Force Personnel Strength	9-5
	9.5.1.1	Monitor Current Operational Strength	9-5
	9.5.1.2	Monitor Force Gains	9-5
	9.5.1.3	Monitor Force Losses	9-6
	9.5.1.4	Monitor Individual Gains	9-6
	9.5.1.5	Monitor Individual Losses	9-7
	9.5.1.5.1	Collect Force Personnel KIA	9-7
	9.5.1.5.2	Collect Force Personnel WIA	9-7
	9.5.1.5.3	Collect Force Personnel MIA	9-8
	9.5.1.5.4	Collect Force Personnel NBDI	9-8
	9.5.1.6	Monitor Critical Personnel Requirements	9-8
	9.5.1.7	Display Force Personnel Charts	9-8
	9.5.1.7.1	Create Force Personnel Charts	9-9
	9.5.1.7.2	Modify Force Personnel Charts	9-9
	9.5.1.7.3	Store Force Personnel Charts	9-9
	9.5.1.7.4	Delete Force Personnel Charts	9-10
	9.5.1.8	Report Personnel Status	9-10
	9.5.1.8.1	Create Personnel Report	9-10
	9.5.1.8.2	Modify Personnel Report	9-10
	9.5.1.8.3	Store Personnel Report	9-11
	9.5.1.8.4	Distribute Personnel Report	9-11
	9.5.1.8.5	Delete Personnel Report	9-11
	9.5.1.8.6	Print Personnel Report	9-11
	9.5.1.8.7	Query Personnel Report	9-12
	9.5.2	Manage Force Casualty Data Base	9-12
	9.5.2.1	Interoperate with the Army Casualty System	9-12
	9.5.2.2	Exchange Data Between Casualty and Personnel Data Bases	9-13
	9.5.3	Manage Casualty Mail	9-13
	9.5.3.1	Exchange Data Between Postal Data Base and Casualty Reporting	
	2.00.00	Systems	9-13
	9.5.4	Provide TASOSC Interface to Personnel Data Base	9-13
SECTION 10	NB	C INFORMATION FUNCTIONAL DECOMPOSITION	. 10-1
	10.1	Function Name	. 10-1
	10.2	Purpose of Function	. 10-1
	10.3	Function Description	. 10-1
	10.4	References	. 10-2
	10.5	Functional Requirements	
	10.5.1	Collect NBC Data From Other Systems	. 10-5

<u>SECTION</u>			<u>PAGE</u>
	10.5.2	Analyze and Disseminate NBC Data	10-5
	10.5.2.1	Prepare Reports and Warnings of NBC Activity	10-5
	10.5.2.2	Generate NBC Reports and Displays	
	10.5.2.2.1	Collect Information for the NBC Overlay	
	10.5.2.2.1.1	Create the NBC Overlay	
	10.5.2.2.1.2	Modify the NBC Overlay	10-7
	10.5.2.2.1.3	Delete the NBC Overlay	10-7
	10.5.5.2.1.4	Store the NBC Overlay	10-7
	10.5.5.2.1.4	Receive NBC Overlay Information	
	10.5.2.3		10-7
	10.5.2.4	Maintain Nuclear/Chemical Strike Data	10-8
	10.5.2.5	Report Predicted Contamination	10-8
	10.5.2.6	Report Actual Contamination	10-8
		Provide NBC Updates to Force Commander's Data Base	10-9
	10.5.3	Maintain NBC Weather Data	10-9
	10.5.3.1	Maintain Basic Wind Data	10-9
	10.5.3.2	Maintain Chemical Downwind Data	10-10
	10.5.3.3	Maintain Nuclear Downwind Data	10-10
	10.5.4	Maintain and Track NBC Logistics Status	10-10
	10.5.5	Maintain and Track NBC Units Status	10-11
	10.5.6	Maintain Nuclear-Capable Command Information	10-11
	10.5.6.1	Query Nuclear-Capable Command Information	10-11
	10.5.6.2	Update Nuclear-Capable Command Information	10-12
	10.5.6.2.1	Add Command Name to Structure	10-12
	10.5.6.2.2	Change Command Alternate Name	10-12
	10.5.6.2.3	Modify Command Structure	10-12
	10.5.6.3	Create Command Structure Reports	10-13
SECTION 11	WEA	THER INFORMATION FUNCTIONAL DECOMPOSITION	11-1
	11.1	Function Name	11-1
	11.2	Purpose of Function	11-1
	11.3	Function Description	11-1
	11.4	References	11-2
	11.5	Functional Requirements	11-2
	11.5.1	Collect Area Weather Effects Data	11-4
	11.5.1.1	Collect Area Visibility Data	11-4
	11.5.1.2	Collect Area Cloud Ceiling Data	11-4
	11.5.1.3	Collect Area Precipitation Data	11-4
	11.5.1.4	Collect Area Wind Speed Data	11-5
	11.5.1.5	Collect Wind Direction Data	
	11.5.1.6	Collect Area Temperature Data	11-5
			11-5
	11.5.1.7	Collect Area Illumination Data	11-5
	11.5.1.8	Collect Area Atmosphesis Pressure Date	11-5
	11.5.1.9	Collect Area Atmospheric Pressure Data	11-6
	11.5.1.10	Collect Remarks Information	11-6
	11.5.2	Conduct Weather Analysis	11-6
	11.5.2.1	Review Past Area Climatic Data	11-6
	11.5.2.2	Receive Weather Studies for the Commander	11-7
	11.5.2.3	Analyze Terrain Weather Effects	11-7
	11.5.2.4	Determine Weather Impacts on the Force	11-7

SECTION			PAGE
	11.5.2.5	Determine Weather Impacts on the Enemy	11-7
	11.5.3	Provide Weather Products	11-8
	11.5.3.1	Provide Daily Weather Report	11-8
	11.5.3.2	Provide Satellite Images	11-8
	11.5.3.3	Provide Wind Data Base	
	11.5.3.4	Provide Severe Weather Warnings	11-9
	11.5.3.4.1	Prepare Severe Weather Warnings	11-9
	11.5.3.4.2	Issue Severe Weather Warnings	11-10
	11.5.3.5	Provide Force Guidance Bulletin	11-10
	11.5.3.6	Provide Weather Forecasts	11-10
	11.5.3.7	Provide Ground Commander's Bulletin	11-11
	11.5.3.8	Provide Weather Observations	11-11
	11.5.3.9	Provide Horizontal Weather Depiction Graphics	11-11
	11.5.4	Store Weather Products	11-12
	11.5.5	Display Weather Products	11-12
	11.5.5.1	Display Weather Impact Matrices	
	11.5.6	Print Weather Products	
	11.5.7	Delete Weather Products	11-13
	11.5.8	Distribute Weather Products	
	11.5.9	Provide Control Node Capability	
	11.5.10	Provide User Node Capability	
SECTION 12	EMI	BEDDED TRAINING FUNCTIONAL DECOMPOSITION	12-1
	12.1	Function Name	12-1
	12.2	Purpose of Function	12-1
	12.3	Function Description	12-1
	12.4	References	12-2
	12.5	Functional Requirements	
	12.5.1	Conduct Category A Embedded Training	
	12.5.1.1	Conduct Performance Recognition	
	12.5.1.2	Manage Training Records	
	12.5.1.3	Provide Common Help Key	
	12.5.1.4	Provide On-line Help	
	12.5.1.5	Provide Mini-Tutorial	
	12.5.1.6	Provide Electronic References	12-6
	12.5.1.7	Provide Operator Courseware	
	12.5.2	Conduct Category C Embedded Training	
	12.5.2.1	Provide Functional Courseware	
	12.5.2.2	Provide Networked Training	12-7
SECTION 13	TRA	AINING/EXERCISE SUPPORT FUNCTIONAL DECOMPOSITION	13-1
	13.1	Function Name	13-1
	13.2	Purpose of Function	
	13.3	Function Description	
	13.4	References	
	13.5	Functional Requirements	
	13.5.1	Exercise Management	
	13.5.2	Simulation	13-3

		PAGE
13.5.2.1	Manage Interface with Simulations	13-3
13.5.2.2	Separate Real-World From Exercise Data	13-5
13.5.3	Training Management	13-5
13.5.3.1	Manage Mission Essential Task List (METL)	13-5
13.5.3.1.1	Receive METLs	13-6
13.5.3.1.2	Prepare METLs	13-6
13.5.3.1.3	Display METLs	13-6
13.5.3.1.4	Store METLs	13-6
13.5.3.1.5	Search the METL Data Base	13-6
13.5.3.1.6	Retrieve METL Information	13-7
13.5.3.1.7	Modify METLs	13-7
13.5.3.1.8	Distribute METLs	13-7
13.5.3.1.9	Delete METLs	13-7
13.5.3.1.10	Print METLs	13-8
13.5.3.1.11	Clear the METL Data Base	13-8
13.5.3.2	Manage Battle Tasks Lists	13-8
13.5.3.2.1	Receive Battle Tasks Lists	13-8
13.5.3.2.2	Prepare Battle Tasks Lists	13-9
13.5.3.2.3	Display Battle Tasks Lists	13-9
13.5.3.2.4	Store Battle Tasks Lists	13-9
13.5.3.2.5	Search the Battle Tasks List Data Base	13-9
13.5.3.2.6	Retrieve Battle Tasks List Information	13-9
13.5.3.2.7	Modify Battle Tasks Lists	13-10
13.5.3.2.8	Distribute Battle Tasks Lists	13-10
13.5.3.2.9	Delete Battle Tasks Lists	13-10
13.5.3.2.10	Print Battle Tasks Lists	13-10
13.5.3.2.11	Clear the Battle Tasks Lists Data Base	13-11
13.5.3.3	Manage the Commander's Training Assessment	13-11
13.5.3.3.1	Receive Training Assessments	13-11
13.5.3.3.2	Prepare Training Assessments	
13.5.3.3.3	Display Training Assessments	
13.5.3.3.4	Store Training Assessment Information	
13.5.3.3.5	Search the Training Assessment Data Base	13-12
13.5.3.3.6	Retrieve Training Assessments	13-12
13.5.3.3.7	Modify Training Assessments	13-12
13.5.3.3.8	Distribute Training Assessments	13-13
13.5.3.3.9	Delete Training Assessments	13-13
13.5.3.3.10	Print Training Assessments	13-13
13.5.3.3.11	Clear the Training Assessment Data Base	13-13
13.5.3.4	Manage the Commander's Training Guidance (CTG)	13-14
13.5.3.4.1	Receive the CTG	13-14
13.5.3.4.2	Prepare the CTG	13-14
13.5.3.4.3	Display the CTG	13-14
13.5.3.4.4	Store CTG Information	13-15
13.5.3.4.5	Search the CTG Data Base	13-15
13.5.3.4.6	Retrieve the CTG	13-15
13.5.3.4.7	Modify the CTG	13-15
13.5.3.4.8	Distribute the CTG	13-15
13.5.3.4.9	Delete the CTG	13-16
1252410	Print the CTG	13-16

SECTION			PAGE
	13.5.3.4.11	Clear the CTG Data Base	13-16
	13.5.3.5	Manage Long-Range Planning Calendars	13-16
	13.5.3.5.1	Receive Long-Range Planning Calendars	13-17
	13.5.3.5.2	Prepare Long-Range Planning Calendars	13-17
	13.5.3.5.3	Display Long-Range Planning Calendars	13-17
	13.5.3.5.4	Store Long-Range Planning Calendars	13-17
	13.5.3.5.5	Search the Long-Range Planning Calendar Data Base	13-18
	13.5.3.5.6	Retrieve Long-Range Planning Calendars	13-18
	13.5.3.5.7	Modify Long-Range Planning Calendars	13-18
	13.5.3.5.8	Distribute Long-Range Planning Calendars	13-18
	13.5.3.5.9	Delete Long-Range Planning Calendars	13-19
	13.5.3.5.10	Print Long-Range Planning Calendars	13-19
	13.5.3.5.11	Clear the Long-Range Planning Calendar Data Base	13-19
	13.5.3.6	Manage Short-Range Training Guidance	13-19
	13.5.3.6.1	Receive Short-Range Training Guidance	13-20
	13.5.3.6.2	Prepare Short-Range Training Guidance	13-20
	13.5.3.6.3	Display Short-Range Training Guidance	13-20
	13.5.3.6.4	Store Short-Range Training Guidance	13-20
	13.5.3.6.5	Search the Short-Range Training Guidance Data Base	13-21
	13.5.3.6.6	Retrieve Short-Range Training Guidance	13-21
	13.5.3.6.7	Modify Short-Range Training Guidance	13-21
	13.5.3.6.8	Distribute Short-Range Training Guidance	13-21
	13.5.3.6.9	Delete Short-Range Training Guidance	
	13.5.3.6.10	Print Short-Range Training Guidance	13-22
	13.5.3.6.11	Clear the Short-Range Training Guidance Data Base	
	13.5.3.7	Manage Short-Range Planning Calendars	13-22
	13.5.3.7.1	Receive Short-Range Calendars	
	13.5.3.7.2	Prepare Short-Range Calendars	
	13.5.3.7.3	Display Short-Range Calendars	
	13.5.3.7.4	Store Short-Range Calendars	
	13.5.3.7.5	Search the Short-Range Calendars Data Base	
	13.5.3.7.6	Retrieve Short-Range Calendars	
	13.5.3.7.7	Modify Short-Range Calendars	
	13.5.3.7.8	Distribute Short-Range Calendars	
	13.5.3.7.9	Delete Short-Range Calendars	
	13.5.3.7.10	Print Short-Range Calendars	
	13.5.3.7.11	Clear the Short-Range Calendars Data Base	
	13.5.3.8	Manage Training Schedules	
	13.5.3.8.1	Receive Training Schedules	
	13.5.3.8.2	Prepare Training Schedules	
	13.5.3.8.3	Display Training Schedules	
	13.5.3.8.4	Store Training Schedules	
	13.5.3.8.5	Search the Training Schedule Data Base	
	13.5.3.8.6	Retrieve Training Schedules	
	13.5.3.8.7	Modify Training Schedules	
	13.5.3.8.8	Distribute Training Schedules	
	13.5.3.8.9	Delete Training Schedules	
	13.5.3.8.10	Print Training Schedules	
	13 5 3 2 1 1	Clear the Training Schedule Data Race	13-28

SECTION			<u>PAGE</u>
SECTION 14		OFFICE AUTOMATION AND BRIEFING SUPPORT FUNCTIONAL	
		DECOMPOSITION	14-1
	14.1	Function Name	14-1
	14.2	Purpose of function	14-1
	14.2	Function Description	14-1
	14.3	References	14-2
	14.4	Functional Requirements	14-3
		Maintain Staff Journal	14-5
	14.5.1	Create Staff Journal Reports	14-5
	14.5.1.1		14-5
	14.5.1.2		14-6
	14.5.1.3		14-6
	14.5.1.4		14-6
	14.5.1.5		14-6
	14.5.1.6		14-7
	14.5.1.7		14-7
	14.5.1.8		14-7
	14.5.1.9		14-7
	14.5.2	Provide Basic Word Processing Functions	14-7
	14.5.2.1	• •	
	14.5.2.2		14-8
	14.5.2.3		14-8
	14.5.2.4		14-9
	14.5.2.5		14-9
	14.5.2.6		14-9
	14.5.2.7		14-9
	14.5.2.8		14-10
	14.5.2.9		14-10
	14.5.2.10		14-10
	14.5.2.1		14-10
	14.5.2.13		14-11
	14.5.2.13		14-11
	14.5.2.1		14-11
	14.5.2.1		14-11
	14.5.2.1		14-12
	14.5.2.1		14-12
	14.5.2.1		14-12
	14.5.2.1		14-12
	14.5.2.2	O Display Print Preview	14-13
	14.5.2.2	Append Text Fields or Files	14-13
	14.5.2.2	File Format Conversion	14-13
	14.5.2.2		14-13
	14.5.2.2	4 Set Date Format	14-14
	14.5.2.2		14-14
	14.5.2.2	6 Set Font	14-14
	14.5.2.2		14-14
	14.5.2.2	8 Underline Text	14-15
	14.5.2.2	9 Bold Text	14-15
	14.5.2.3	and the second s	14-15
	14522		14-15

<u>SECTION</u>			PAGE
	14.5.2.32	Indent Text	14-16
	14.5.2.33	Draw Lines	14-16
	14.5.2.34	Draw Boxes	14-16
	14.5.2.35	Select Text	
	14.5.2.36	Create Tables	
	14.5.2.37	Undelete Text	
	14.5.2.38	Set Margins	
	14.5.3	Run DOS-based Applications	
	14.5.3.1	Provide Menu Options Bar	
	14.5.3.2	Provide Coprocessor Configuration	
	14.5.3.3	•	
	14.5.3.4	Provide Keyboard Mapping	
		Provide DOS Procedures	
	14.5.4	Provide Copy/Transmit Functions	
	14.5.5	Provide Transfer Procedure	
	14.5.6	Provide Integrated Spreadsheet	
	14.5.7	Provide Automated Briefing Capability	
	14.5.7.1	Provide Sequenced Briefing Capability	
	14.5.7.1.1	Link Briefing Slides to Data Bases	
	14.5.7.2	Provide Graphics Editor Capability	
	14.5.7.2.1	Provide Object Selection Menu	
	14.5.7.2.2	Provide Style Menu	
	14.5.7.2.3	Provide Fill Menu	
	14.5.7.2.4	Provide Slide Menu	
	14.5.7.2.5	Provide Line Width Menu	14-23
	14.5.7.2.6	Provide Edit Functions	
	14.5.7.2.7	Provide Data Base Menu	
	14.5.7.2.8	Provide Color Menu	
	14.5.7.2.9	Provide Font Menu	
	14.5.7.2.10	Provide Line Menu	
	14.5.7.2.11	Provide Drawing Palette	
	14.5.7.3	Provide Large Screen Display	
	14.5.7.4	Print Products in Color	
	14.5.7.5	Create Quick Charts	
	14.5.7.6	Provide File Operations	
	14.5.7.6.1	Display File Menu	
	14.5.7.6.2	Display Special Menu	
	14.5.8	Provide Calendar/Scheduler	
	14.5.9	Provide Common Printing Capabilities	
	14.5.10	Provide Bulletin Board	14-28
SECTION 15	STAN	NDARD REFERENCE FILES FUNCTIONAL DECOMPOSITION	. 15-1
	15.1	Function Name	. 15-1
	15.1	Purpose of Function	
	15.3	Function Description	
	15.4	References	
	15.5	Functional Requirements	
	15.5.1	Provide Reference Library Function	
	15.5.1.1	Provide JOPES Standard Reference Files	
	15.5.1.1.1	Provide TUCHA File	15-4

SECTION			<u>PAGE</u>
	15.5.1.1.2	Provide TUDET File	15-5
	15.5.1.1.3	Provide WWMMCCS Standard Geolocation File	15-5
	15.5.1.1.4	Provide APORTS File	15-5
	15.5.1.1.5	Provide PORTS File	15-5
	15.5.1.1.6	Provide ASSETS File	15-6
	15.5.1.1.7	Provide CHSTR File	15-6
	15.5.1.1.8	Provide SORTS File	15-6
	15.5.1.1.9	Provide LEF File	15-6
	15.5.1.1.10	Provide MED DB File	15-7
	15.5.1.1.11	Provide CEF File	15-7
	15.5.1.1.12	Provide SVC FM LIB File	15-7
	15.5.1.2	Provide CIA Worldbook	15-7
	15.5.1.3	Provide Reference Encyclopedia	15-8
	15.5.1.4	Provide and Maintain the Force Standing Operating Procedures (SOP)	15-8
	15.5.1.4.1	Receive Force SOPs	15-8
	T = 1 = 1 = 1	Prepare Force SOPs	15-8
	15.5.1.4.2	Print Force SOPs	15-9
	15.5.1.4.3	Store Force SOPs	15-9
	15.5.1.4.4	Distribute Force SOPs	15-9
	15.5.1.4.5	Display SOPs	15-9
	15.5.1.4.6	Provide Theater-Unique Reference Files	15-10
	15.5.1.5	Provide On-Line Threat Doctrine	15-10
	15.5.1.6	Provide North Korean Doctrine	15-10
	15.5.1.6.1	Provide Chinese Doctrine	15-10
	15.5.1.6.2	Provide Russian Doctrine	15-11
	15.5.1.6.3	Provide Iraqi Doctrine	15-11
	15.5.1.6.4	Provide Regional Combat Studies	15-11
	15.5.1.6.5	Provide ABCS User's Manuals	15-11
	15.5.1.7	Provide On-Line Force Doctrine	15-12
	15.5.1.8	Provide Access to FM 100-5	15-12
	15.5.1.8.1	Provide Access to FM 101-5	15-12
	15.5.1.8.2	Provide Access to FM 100-15	15-12
	15.5.1.8.3	Provide Access to FM 6-20	15-13
	15.5.1.8.4 15.5.1.8.5	Provide Access to C&GSC ST 100-9	15-13
	15.5.1.8.6	Provide Access to Weapon Data	15-13
	15.5.1.9	Access Library Information	15-13
	15.5.1.10	Provide Standard Encyclopedia Search Interface	15-14
	15.5.1.11	Move Between Related Documents	15-14
	15.5.1.12	Provide Encyclopedia Graphic Interface	15-14
	15.5.1.12	Create Information Summaries	15-15
	15.5.1.14	Add and Update Information	15-15
		Provide Geographical Index Capability	15-15
	15.5.1.15	Retrieve Information Using Key Words/Phrases	15-16
	15.5.1.16	Perform Language Translation	15-16
	15.5.2	Perform German Translation	15-16
	15.5.2.1	Perform French Translation	15-17
	15.5.2.2	Perform Arabic Translation	15-17
	15.5.2.3	Perform Hebrew Translation	15-17
	15.5.2.4		15-17
	15.5.2.5	Perform Spanish Translation	15-17
	15.5.2.6	Perform Greek Translation	13-10

SECTION			PAGE
	15.5.2.7	Perform Italian Translation	15-18
	15.5.2.8	Perform Korean Translation	15-18
	15.5.2.9	Perform Turkish Translation	15-18
	15.5.2.10	Perform Swedish Translation	15-18
	15.5.2.11	Perform Danish Translation	15-19
	15.5.2.12	Perform Flemish Translation	15-19
	15.5.2.13	Perform Norwegian Translation	15-19
GLOSSARY			G-1

LIST OF FIGURES

2-1Friendly Situation Decomposition2-42-2SITMAP Display Decomposition2-53-1Enemy Situation Decomposition3-43-2IPB Decomposition3-53-3Conduct Threat Evaluation Decomposition3-6
2-2SITMAP Display Decomposition2-53-1Enemy Situation Decomposition3-43-2IPB Decomposition3-53-3Conduct Threat Evaluation Decomposition3-6
3-2 IPB Decomposition
3-3 Conduct Threat Evaluation Decomposition
3-4 Develop Enemy Order of Battle Decomposition 3-7
3-5 Determine Threat Intentions Decomposition
3-6 Develop Situation Templates Decomposition
3-7 Develop Event Templates Decomposition
4-1 COA Development and Analysis Decomposition
4-2 Receive New Mission Information Decomposition 4-5
4-3 Manage Facts and Assumptions Decomposition 4-6
4-4 Analyze the Mission Decomposition 4-6
4-5 Determine Restrictions/Constraints Decomposition 4-7
4-6 Identify Specified Tasks Decomposition
4-7 Identify Implied Tasks Decomposition
4-8 Identify Essential Tasks Decomposition
4-9 Conduct Initial Time Analysis Decomposition 4-8
4-10 Issue Restated Mission Decomposition
4-11 Issue Commander's Planning Guidance Decomposition 4-9
4-12 Prepare/Distribute Warning Order Decomposition
4-13 Develop Staff Estimates Decomposition
4-14 Develop COAs Decomposition
4-15 Develop a Course of Action Decomposition
4-16 Analyze and Compare COAs Decomposition 4-14
4-17 Conduct Risk Analysis/Assessment Decomposition 4-15
4-18 Select A COA Decomposition
4-19 Develop Decision Support Template Decomposition 4-16
4-20 Develop Decision Support/Synch Matrix Decomposition 4-16
5-1 OPLAN/OPORD/Annex Generator Decomposition
5-2 Compile the OPLAN Decomposition
5-3 Issue the OPORD Decomposition
5-4 Issue FRAGO Decomposition
5-5 Develop FRAGO Summary List Decomposition
6-1 Terrain Evaluation Decomposition
7-1 Supplies and Equipment Decomposition
8-1 Convoy Planning Decomposition 8-3
9-1 Personnel Resources Decomposition 9-4
10-1 NBC Information Decomposition
11-1 Weather Information Decomposition
12-1 Embedded Training Decomposition
13-1 Training/Exercise Support Decomposition
14-1 Office Automation and Briefing Support Decomposition
15-1 Standard Reference Files Decomposition

ARMY BATTLE COMMAND SYSTEM

(ABCS)

LAYER 4 COMMON CORE APPLICATIONS

SECTION 1

INTRODUCTION

1.1 PURPOSE

The purpose of this document is to provide an analysis of the Army Battle Command System (ABCS) common core applications. The ABCS establishes a common operating methodology and standards for integration of command and control functions.

1.2 COMMON TASKS

Within the ABCS, there are multiple systems that have similar, or common, applications or functions. These systems were initiated separately and focused on providing products to a specific user echelon or battlefield functional area. The TRADOC Proponency Integration Office (TPIO)-ABCS has reviewed those systems to determine those functions and applications that are common to multiple ABCS systems. The following list shows the common functions that are directly associated with the Maneuver Control System (MCS), Standard Theater Army Command and Control System (STACCS), and Army Global Command and Control System (AGCCS) functions:

- Friendly Situation
- Enemy Situation
- Course of Action Development and Analysis
- OPLAN/OPORD/Annex Generator
- Terrain Evaluation
- Supplies and Equipment

- Convoy Planning
- Personnel Resources
- NBC Information
- Weather Information
- Embedded Training
- Training/Exercise Support
- Office Automation and Briefing Support
- Standard Reference Files

1.3 FORCE XXI BATTLE COMMAND BRIGADE AND BELOW (FBCB2)

The section above made no reference to the Force XXI Battle Command Brigade and Below (FBCB2) system. However, the functions in the list correlate with the information and core functions of FBCB2. Where applicable, the list contains the FBCB2 functions within the ABCS common functions. Each system addresses similar or common functions at differing echelons of employment. The display media and use of the information is basically the same, however, each echelon focuses on a different level of resolution. Eventually, the systems at echelons above brigade-level must rely on source data automation. Division and higher echelons will get the information they require from automated systems at brigade-level and below. Therefore, FBCB2 requirements are included within the ABCS common functions, as appropriate.

1.4 USER REQUIREMENTS

This document focuses on the common user requirements of the fourteen common applications. The user requirements were determined by combining and reconciling the applicable requirements for the FBCB2, MCS, STACCS, and AGCCS. The following sections list and describe the user requirements for each common function. Each section explains the purpose of the function and describes its capabilities. It also lists the documents from which the requirements are derived. Accompanying each section is a wiring diagram depicting the hierarchy of the requirements.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 2

FRIENDLY SITUATION FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the friendly situation common user requirements.

2.1 FUNCTION NAME

Friendly Situation

2.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to monitor information on friendly forces and to manage the situation map (SITMAP).

2.3 FUNCTION DESCRIPTION

The *Friendly Situation* function supports commanders and staffs (combat, combat support, and combat service support) in accessing and displaying friendly force information, and in handling the SITMAP. It will facilitate battle command by automating force assessment throughout the force projection cycle. Its products will enhance situational awareness, assist in fratricide avoidance, and provide for effective and efficient force tracking.

This function includes the capability to:

- Access location, activity, and resource status information of friendly units.
- Display information in graphic and text formats on a map and/or map surrogate background.
- Generate a commander's situation report in graphic and/or text format.
- Access the friendly relevant common picture.

- Define and tailor selected information, and display it in accordance with unit standing operating procedures (SOP).
- Monitor the deployment of forces into the theater.
- Select, manipulate, and query a variety of map types.
- Display and query the friendly and functional overlays on the SITMAP.
- Create and edit SITMAP graphics.
- Display a three-dimensional view of the battlefield.

Friendly force information will include at a minimum: unit, commander, and command post locations; unit identification, type, and size; readiness level and combat effectiveness; commander's assessment; nuclear, biological, and chemical (NBC) data; parent unit and country of allegiance; timeliness of information; activity; associated operational graphics; and operation plan/operation order (OPLAN/OPORD) in use. The function will also maintain personnel, equipment, petroleum, oil, and lubricants (POL), and ammunition status, by unit. Information will be displayed on a map/map surrogate background and in text format. Users require access to unit resource displays and summaries. Users will be able to create, modify/edit, receive, save, delete, display, print, query, and transmit friendly force information.

2.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.4.3.1 & 3.2.1.3.2.
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 2.4.6.1.2
 & 3.2.1.4.1.1.
- Standard Theater Army Command and Control System (STACCS) UFD, Sections 3.2.1.8
 and 3.2.2.17.

Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.2.

2.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figures 2-1 and 2-2 depict the hierarchy of the user functional requirements.

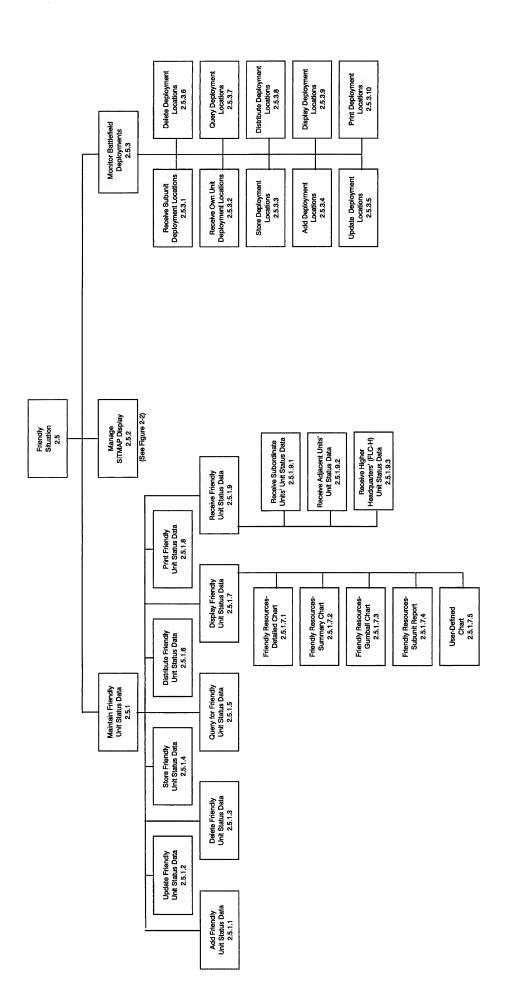


Figure 2-1 Friendly Situation Decomposition

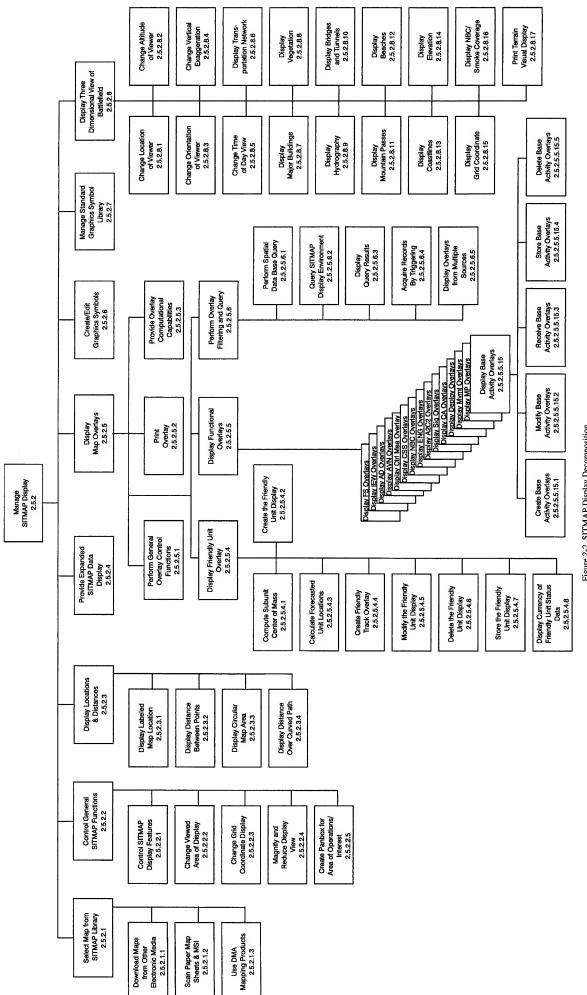


Figure 2-2 SITMAP Display Decomposition

2.5.1 Maintain Friendly Unit Status Data

Description: Users require the capability to maintain unit status information about friendly forces (both US and allied) following transfer of authority (TOA). Status data that users will maintain includes current OPLAN; unit identification code (UIC); unit number, branch, and level; unit description; unit name, type, country, component, and parent unit; command post (CP), commander, and forward line of own troops (FLOT) locations (including the last three subunits' and sub-subunits' locations); readiness status of personnel, equipment, POL, and ammunition; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and TOA or turnover indication. All users will be able to query the friendly unit status database for information and add information to it; however, only authorized users may delete or update status data.

<u>Source Documents</u>: STACCS UFD, Sections 3.2.1.8.1 & 3.2.1.8.2; AGCCS SSS, Section 3.2.1.4.3.1; MCS UFD, Sections 3.2.1.4.1.1.1.1 & 3.2.1.4.1.1.5.3.

Satisfaction Source: Manual input for non-ABCS equipped, subordinate unit data. Platform-level source data entry for own unit data. Automatic electronic feed from subordinate and adjacent units, and higher headquarters.

2.5.1.1 Add Friendly Unit Status Data

<u>Description</u>: All users will be able to add unit status information to the friendly unit data base (for that specific unit and all units subordinate to that unit in the command hierarchy) by generating and viewing a blank unit status form and entering data in the appropriate fields. Status data that users may add includes OPLAN; UIC; CP, commander, and FLOT locations; date-time group (DTG); personnel, equipment, POL, and ammunition readiness ratings; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and TOA and turnover information.

Source Documents: STACCS UFD, Sections 3.2.1.8.1.1 & .2.1; FBCB2 UFD, Sections 3.4.2.7.1 & 3.4.2.8.1; MCS UFD, Sections 3.2.1.4.1.1.5.3.2 & 3.2.1.4.1.1.5.1.7.

Satisfaction Source: Manual input for non-ABCS equipped, subordinate unit data. Platform-level

source data entry for own unit data. Automatic electronic feed from subordinate and adjacent units, and higher

headquarters.

Update Friendly Unit Status Data 2.5.1.2

Description: Authorized users will be able to update status information in the friendly unit data

base (for that specific unit and all units subordinate to that unit in the command hierarchy). Status data that users

may edit includes OPLAN; UIC; CP, commander, and FLOT locations; DTG; personnel, equipment, POL and

ammunition readiness ratings; NBC data (i.e., radiation and chemical agent exposure and decontamination status);

commander's assessment; and TOA and turnover information.

Source Documents: STACCS UFD, Sections 3.2.1.8.1.3 & 3.2.1.8.2.3; FBCB2 UFD, Sections

3.4.2.7.2 & 3.4.2.8.2; MCS UFD Sections 3.2.1.4.1.1.5.3.5 & 3.2.1.4.1.1.5.3.6.

Satisfaction Source: Manual input for non-ABCS equipped, subordinate unit data. Platform-level

source data entry for own unit data. Automatic electronic feed from subordinate and adjacent units, and higher

headquarters.

Delete Friendly Unit Status Data 2.5.1.3

Description: Authorized users will be able to delete unit status information from the friendly unit

data base (for all units having reference data there). Status data that authorized users may delete includes OPLAN;

UIC; CP, commander, and FLOT locations; DTG; personnel, equipment, POL and ammunition readiness ratings;

NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and

TOA and turnover information.

Source Documents: STACCS UFD, Sections 3.2.1.8.1.4 & 3.2.1.8.2.4; FBCB2 UFD, Sections

3.4.2.7.5 & 3.4.2.8.5; MCS UFD, Sections 3.2.1.4.1.1.1.11, 3.2.1.4.1.1.1.14, 3.2.1.1.1.5.1.6, 3.2.1.4.1.1.5.3.9 &

3.2.1.4.1.1.5.3.10.

Satisfaction Source: Friendly unit status data base files.

2-7

2.5.1.4 Store Friendly Unit Status Data

<u>Description</u>: Users will be able to store unit status information from the friendly unit data base (for all units having reference data there). Status data that users may store includes OPLAN; UIC; CP, commander, and FLOT locations; DTG; personnel, equipment, POL and ammunition readiness ratings; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and TOA and turnover information.

<u>Source Documents</u>: MCS UFD, Sections 3.2.1.4.1.1.1.10, 3.2.1.4.1.1.1.1.13, 3.2.1.4.1.1.5.1.3 & 3.2.1.4.1.1.5.3.4; FBCB2 UFD, Sections 3.4.2.7.4 & 3.4.2.8.4.

<u>Satisfaction Source</u>: Manual input for non-ABCS equipped, subordinate unit data. Platform-level source data entry for own unit data. Automatic electronic feed from subordinate and adjacent units, and higher headquarters.

2.5.1.5 Query for Friendly Unit Status Data

<u>Description</u>: All users will be able to query the friendly unit data base, by OPLAN, (for that specific unit and all units subordinate to that unit in the command hierarchy) for status information by generating and viewing a blank unit status screen and entering appropriate data in the fields. Status data that all users may use as query fields includes OPLAN; UIC; CP, commander, and FLOT locations; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and personnel, equipment, POL, and ammunition readiness ratings.

<u>Source Documents</u>: STACCS UFD, Sections 3.2.1.8.1.2 & 3.2.1.8.2.2; FBCB2 UFD, Sections 3.4.2.7.8 & 3.4.2.8.8.

Satisfaction Source: Friendly unit status data base files.

2.5.1.6 Distribute Friendly Unit Status Data

<u>Description</u>: Users will be able to distribute unit status information from the friendly unit data base (for all units having reference data there) to other users and units. Status data that users may distribute includes OPLAN; UIC; CP, commander, and FLOT locations; DTG; personnel, equipment, POL and ammunition readiness

ratings; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and TOA and turnover information.

<u>Source Documents</u>: FBCB2 UFD, Sections 3.4.2.7.9 & 3.4.2.8.9; MCS UFD, Sections 3.2.1.4.1.1.5.1.4 & 3.2.1.4.1.1.5.3.7.

Satisfaction Source: Friendly unit status data base files.

2.5.1.7 Display Friendly Unit Status Data

<u>Description</u>: Users will be able to display unit status information from the friendly unit data base (for all units having reference data there). Status data that users may display includes OPLAN; UIC; CP, commander, and FLOT locations; DTG; personnel, equipment, POL and ammunition readiness ratings; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and TOA and turnover information. The function will also be capable of displaying the impact of weather on operations.

<u>Source Documents</u>: MCS UFD, Sections 2.4.6.1.2.1, 2.4.6.1.2.2, 3.2.1.4.1.1.5.1.2 & 3.2.1.4.1.1.5.3.3; FBCB2 UFD, Sections 3.4.2.7.6 & 3.4.2.8.6.

Satisfaction Source: Friendly unit status data base files.

2.5.1.7.1 Friendly Resources-Detailed Table

<u>Description</u>: The Friendly Resources-Detailed Table will convey the status of specific resource items using text enhanced by color coding and text arrayed in spreadsheets. Force Level Control Software (FLC-S/W) will prepare a separate spreadsheet for each of the resource categories named in [MCS UFD, Section] 2.4.6.1.2.2. If a unit does not stock a particular item, the corresponding cell will display "N/A". Item status at a unit will be displayed in a cell of the table conveying item color status, ratio of on-hand/operational to authorized stockage, actual numeric total of items on-hand/operational, and number of items authorized. This will be done in the following manner.

1. Color status, which is an interpretation of the ratio described in the next paragraph, using the scheme previously defined in [MCS UFD, Section] 2.4.6.1.2. The background will be the color representing the ratio.

2. The ratio of on-hand/operational to authorized stockage or quantity at the reporting unit, expressed as a percentage.

Source Document: MCS UFD, Section 2.4.6.1.2.2.1.

Satisfaction Source: Friendly unit status data base files.

2.5.1.7.2 Friendly Resources-Summary Chart

<u>Description</u>: The Friendly Resources-Summary Chart conveys information on the status of a unit and will contain the following:

- Overall status of up to six resource categories, including "command-specified." The other categories can be any one of those listed in [MCS UFD, Section] 2.4.6.1.2.2. FLC-S/W will permit the user to select these categories. Overall status of a resource category will be conveyed using text enhanced by color in an associated wedge of a six-sectioned circle, using the color coding scheme described in [MCS UFD, Section] 2.4.6.1.2. The color will be derived by applying the same algorithm used in the Friendly Resources-Detailed Table to determine the overall evaluation for an entire resource category. FLC-S/W will permit the commander or his designee to override the color of any section of the circle and change it to another. Upon doing so, FLC-S/W will display a special character, such as an asterisk, denoting this intervention. An update that would change original color evaluation of the category will nullify this intervention and result in the display of the computed color.
- 2. The status of up to six resource items in the command-specified category (that is, items assigned priority 1). This status will be conveyed as the ratio of on-hand/operational to authorized stockage or quantity, expressed as a percentage, reflecting the parent unit's roll-up that will appear in the Friendly Resources-Detailed Table. FLC-S/W will select for display the command-specified items with the lowest percentage.
- 3. The status of up to six specific items in the remaining categories displayed (that is, items assigned priority 2). This status will be conveyed as the ratio of on-hand/operational to authorized stockage or quantity, expressed as a percentage, reflecting the parent unit's roll-up that will appear in the Friendly Resources-Detailed Table. FLC-S/W will select for display the command-specified items with the lowest percentage. If any item within a particular category (for example, Class VII) is included among the command-specified items, the heading for the category will have appended to it the word "Other" (for example, Other Class VII).
 - 4. The identity of the operations order for the current mission and task organization.

Nuclear, biological, and chemical status in terms of operation exposure guidance (OEG), 5.

radiation status level, and mission-oriented protective posture (MOPP).

Locations of the CPs. If a CP is in the process of relocating, FLC-S/W shall display a 6.

special character, such as an asterisk, next to the display of the location. In this case, the location displayed shall

denote the future location of the CP.

7. Location of the helipad at the main CP.

The NBC data (i.e., radiation and chemical agent exposure and decontamination status 8.

subjective readiness evaluation, expressed in text enhanced by color, using the green/amber/red/black status scheme.

The date-time that the evaluation was last updated will accompany the evaluation.

The effective date-time when the status of any of the resources being tracked was last 9.

updated.

Source Document: MCS UFD, Section 2.4.6.1.2.2.2.

Satisfaction Source: Friendly unit status data base files.

Friendly Resources-Gumball Chart 2.5.1.7.3

Description: The Friendly Resources-Gumball Chart display will portray the status of a unit by

reporting pacing items in color-coded circles situated in a spreadsheet format.

Source Document: MCS UFD, Section 2.4.6.1.2.2.3.

Satisfaction Source: Friendly unit status data base files.

Friendly Resources-Subunit Summary Situation Report 2.5.1.7.4

Description: The Friendly Resources-Subunit Summary Situation Report will convey information

on the status of subordinate units. The subunit summary situation report will contain the same information as

specified for the summary chart described in paragraph [MCS UFD, Section] 2.4.6.1.2.2.2 except that it shall will

to the local unit's subordinate units.

2-11

Source Document: MCS UFD, Section 2.4.6.1.2.2.4.

Satisfaction Source: Friendly unit status data base files.

2.5.1.7.5 User-Defined Chart

<u>Description</u>: Users require the capability to create a chart with a user-defined format. Such a chart will be able to display user-selected friendly unit status data in any format the user defines. The function will provide a graphic data base report form that gives the operator the capability to pick and choose data items from linked lists of available data for a given object, unit, entity or type of information that is being tracked by the system.

Source Document: MCS UFD, Section 2.4.6.2.1.

Satisfaction Source: Friendly unit status data base files.

2.5.1.8 Print Friendly Unit Status Data

<u>Description</u>: Users will be able to print unit status information from the friendly unit data base (for all units having reference data there). Status data that users may print includes OPLAN; UIC; CP, commander, and FLOT locations; DTG; personnel, equipment, POL and ammunition readiness ratings; NBC data (i.e., radiation and chemical agent exposure and decontamination status); commander's assessment; and TOA and turnover information.

<u>Source Documents</u>: FBCB2 UFD, Sections 3.4.2.7.7 & 3.4.2.8.7; MCS UFD, Sections 3.2.1.4.1.1.5.1.5 & 3.2.1.4.1.1.5.3.8.

Satisfaction Source: Friendly unit status data base files.

2.5.1.9 Receive Friendly Unit Status Data

<u>Description</u>: Subordinate, adjacent, and higher units will report platoon echelon and above unit locations and subordinate CP locations with this function. This function will receive own unit CP locations.

Source Documents: MCS UFD, Sections 3.2.1.4.1.1.1.1 & 3.2.1.4.1.1.5.1.1; FBCB2 UFD, Sections 3.4.2.7.3 & 3.4.2.8.3.

Satisfaction Source: Manual input for non-ABCS equipped, subordinate unit data. Platform-level source data entry for own unit data. Automatic electronic feed from subordinate and adjacent units, and higher headquarters.

2.5.1.9.1 Receive Subordinate Units' Unit Status Data

<u>Description</u>: Subordinate units will report platoon echelon and above unit locations and subordinate CP locations with this function.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.3.1.

<u>Satisfaction Source</u>: Automatic electronic feed from subordinate units, except manual input for non-ABCS equipped subordinate units.

2.5.1.9.2 Receive Adjacent Units' Unit Status Overlays

Description: This function will receive the adjacent units' unit status data.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.12.

Satisfaction Source: Automatic electronic feed from adjacent units, except manual input for non-ABCS equipped adjacent units.

2.5.1.9.3 Receive Higher Headquarter's (Force Level Control Higher [FLC-H]) Unit Status Data

Description: This function will receive the higher headquarter's unit status data.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.

Satisfaction Source: Automatic electronic feed from the higher headquarters.

2.5.2 Manage SITMAP Display

<u>Description</u>: This function will receive, update, store, manipulate, display, print, delete, and query present current situation map information.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17; MCS UFD, Section 3.2.1.4.1.1.1; AGCCS SSS, Section 3.2.1.3.2.

<u>Satisfaction Source</u>: Unit locations and status data for the friendly unit display from requirement 2.5.1. Overlays from OPLAN/OPORD/Annex common function (see Section 5) or other appropriate application.

2.5.2.1 Select Map from SITMAP Library

<u>Description</u>: The user will be able to view a listing of available maps in the local map directory, and to select a desired map sheet for display on the screen. Users will be able to select maps by map name and map series. By entering a geographic coordinate location, country name, or city name, a user will be able to view a list of maps, by name, series, and scale, that contain the selected location. Users will also be able to display lists of available maps that are of larger and smaller scale, and maps that are adjacent to the map sheet currently displayed. In addition, this map list will contain a master data base of all available maps for the command. The SITMAP application will inform the user how to load a particular map from the list of maps contained in the map library. The user will be able to select and display maps from these lists, delete maps from the local library, and print maps, including overlaid information.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.1; MCS UFD, Sections 3.2.1.4.1.1.14.1.1 & 3.2.1.4.1.1.1.14.3; AGCCS SSS, Section 3.2.1.3.2.2.

Satisfaction Source: The system's electronic storage media or the unit's master map data base.

2.5.2.1.1 Download Maps From Other Electronic Media

<u>Description</u>: The user requires the capability to download digitized maps from peripheral storage devices and other electronic media, including CD-ROM, optical disk, locally prepared magneto-optical disk, 16-track tape, network map servers, and digital audio tape (DAT).

Source Documents: STACCS UFD, Section 3.2.2.17.1.1; AGCCS SSS, Section 3.2.1.3.2.2.

Satisfaction Source: The system's electronic storage media or the unit's master map data base.

Scan Paper Map Sheets and Multispectral Imagery (MSI) 2.5.2.1.2

Description: Selected users require the capability to scan non-Defense Mapping Agency (DMA)

maps or images, such as MSI, into the system, then register and crop the map image, and to store and retrieve the

scanned maps for later use by all users. The information on the maps will automatically update the Map Library.

Source Documents: STACCS UFD, Section 3.2.2.17.1.2; AGCCS SSS, Section 3.2.1.3.2.2.

Satisfaction Source: Unit topographic or G/S-2 section.

Use DMA Mapping Products 2.5.2.1.3

Description: Users will be able to access DMA map products (ADRG, CRG, ADRI, ITD, TTD,

and DTED data) directly from a device located at each workstation.

Source Documents: STACCS UFD, Section 3.2.2.17.1.3; AGCCS SSS, Section 3.2.1.3.2.2.

Satisfaction Source: The system's electronic storage media or the unit's master map data base.

Control General SITMAP Functions 2.5.2.2

Description: The user requires the capability to perform general SITMAP control functions. These

functions include adjusting map color level, brightness, and contrast; establishing and saving one or more

user-defined profiles that set session preferences such as map window size, display formats, and filters; creating,

editing, and saving a snapshot of a map, together with a situation overlay; repositioning the displayed SITMAP area;

and managing the map inventory available at the workstation.

Source Documents: STACCS UFD, Section 3.2.2.17.2; MCS UFD, Section 3.2.1.4.1.1.14.2;

AGCCS SSS, Section 3.2.1.3.2.3.

Satisfaction Source: User-defined.

2-15

2.5.2.2.1 Control SITMAP Display Features

<u>Description</u>: The user will be able to control the display presentation of the SITMAP on the screen. Specifically, while using a map, users will be able to view any section of the map sheet, and to select between two types of display of grid coordinates (latitude/longitude or military grid reference system). The user will have the capability to display within a separate window additional map legend information, to include; map legend display, cartographic information, elevation information, accuracy data, declination diagram, glossary of terms, and source/owner of map data.

Source Documents: STACCS UFD, Section 3.2.2.17.2.1; MCS UFD, Section 3.2.1.4.1.1.14.2.

Satisfaction Source: User-defined.

2.5.2.2.2 Change Viewed Area of Display

Description: The user will be able to control the display presentation of the SITMAP on the screen by panning, jumping, and/or changing the map scale. Specifically, while using a map, users will be able to see a window containing a miniature view of the entire map sheet, with the portion of the map sheet in use indicated thereon. Users will be able to toggle this miniature view on and off as desired. The user will also be able to display seamless maps, and to move around the map in all directions in a continuous motion in the panbox or map window. Where adjacent sheets do not exist, the SITMAP will display a grey area within the panbox and the map window while maintaining military grid and geographic coordinate representations within the grey area for the cursor or any dynamically linked objects (overlays).

Source Documents: STACCS UFD, Section 3.2.2.17.2.2; MCS UFD, Section 3.2.1.4.1.1.1.14.2.1.

Satisfaction Source: User-defined.

2.5.2.2.3 Change Grid Coordinate Display

<u>Description</u>: The user will be able to display the geographic coordinates of any selected point on the map. Users will be able to select either military grid reference system (MGRS) coordinates (and select the number of digits to be displayed [4,6,8,10,12]) or latitude/longitude to be displayed. Users will be able to toggle the coordinate display on and off, and move the display.

Source Documents: STACCS UFD, Section 3.2.2.17.2.3; MCS UFD, Section 3.2.1.4.1.1.14.2.2.

Satisfaction Source: User-defined.

2.5.2.2.4 Magnify and Reduce Display View

Description: The SITMAP application will provide the user with a continuous zoom-in and zoom-out capability. Where lower or larger scale maps are available, this operation will result in a change to the appropriate larger or smaller scale map sheet with the center of the map centered on the geographic position of the cursor on the previous map sheet. Where no larger or smaller maps are available, SITMAP will provide the user the capability to perform a simple hardware pixel representation at variable magnification and reduction scales,

tailored to the types of graphics used by the system and the network.

Source Documents: STACCS UFD, Section 3.2.2.17.2.4; MCS UFD, Section 3.2.1.4.1.1.14.2.3.

2.5.2.2.5 Create Panbox for Area of Operation/Interest

Description: The user requires the capability to designate an Area of Operation/Interest (AOI) by either selecting an area within a panbox and highlighting the area desired, by entering the bounding geographic coordinates and map scale, or by specifying a series of map/image products and the desired scale. The user will be able to name and save this AOI as well as any specific SITMAP environment variable associated with the AOI (i.e., coordinate systems, overlays, user graphics, etc.). The SITMAP application will create a specific panbox for each AOI and will allow more than one AOI panbox to be displayed at a time. The user will be able to select the AOI

panbox which will activate SITMAP, and to display the full scale map of the desired AOI.

Source Document: STACCS UFD, Section 3.2.2.17.2.5.

Satisfaction Source: User-defined.

2.5.2.3 Display Locations and Distances

<u>Description</u>: Users will be able to display a point and label showing the coordinates of any location on the map. A user will also be able to display the measured distance between any two map points, as well as the area covered by a circle of any radius centered at any map point. Users will be able to delete all labels individually, by category of marker (location, distance, circle), or all markers simultaneously.

2-17

Source Documents: STACCS UFD, Section 3.2.2.17.3; MCS UFD, Section 3.2.1.4.1.1.14.4; AGCCS SSS, Section 3.2.1.3.2.4.

Satisfaction Source: User-defined.

2.5.2.3.1 Display Labeled Map Location

<u>Description</u>: Users will be able to mark a location on the SITMAP and display a label showing the coordinates of the point. A user will be able to move the label to a nearby position, toggle the label on and off, reset the label to its original position, display the label in front of, or behind, other markers and labels, and delete the location marker and its associated label.

Source Documents: STACCS UFD, Section 3.2.2.17.3.1; MCS UFD, Section 3.2.1.4.1.1.1.14.4.1.

Satisfaction Source: User-defined.

2.5.2.3.2 Display Distance Between Points

<u>Description</u>: Users will be able to select and display a measured distance between any two points, or the cumulative distance between a series of points, on the SITMAP. The measured distance will appear as a label showing the distance, in kilometers, between the points. A user will be able to move the label to a nearby position, toggle the label on and off, reset the label to its original position, display the label in front of, or behind, other markers and labels, and delete the distance marker and its associated label.

Source Documents: STACCS UFD, Section 3.2.2.17.3.2; MCS UFD, Section 3.2.1.4.1.1.14.4.2.

Satisfaction Source: User-defined.

2.5.2.3.3 Display Circular Map Area

<u>Description</u>: Users will be able to select and display a circular area of any radius centered on any point on the SITMAP. The measured diameter of the circle, in kilometers, and the total area, in square kilometers, will appear as a label. A user will be able to move a label to a nearby position, toggle the label on and off, reset the label to its original position, display the label in front of, or behind, other markers and labels, and delete the circle and its associated label.

Source Documents: STACCS UFD, Section 3.2.2.17.3.3; MCS UFD, Section 3.2.1.4.1.1.14.4.3.

Satisfaction Source: User-defined.

2.5.2.3.4 Display Distance Over Curved Path

<u>Description</u>: Users will be able to trace a route over a curved path on the map and to see displayed the ground distance covered by that route. The user will be able to access a conversion toolbox feature that enables him to convert the displayed distance to time, using any desired rate of movement.

Source Document: STACCS UFD, Section 3.2.2.17.3.4.

Satisfaction Source: User-defined.

2.5.2.4 Provide Expanded SITMAP Data Display

<u>Description</u>: The user requires a capability to select objects on a SITMAP, such as airfields, facilities, units, selected key terrain, and lines-of-communications (LOCs), and obtain more detailed information about them in a display window. The detailed information will include, as available, photographs, textual data, geographic information, and other relevant data. Other typical objects are: pie charts, bar charts, text charts, line charts, bullet charts, table charts, time lines, organizational charts, embedded graphic images (i.e., airfield image in a GIF or CGM format). Users also require the capability to update selected objects by adding details as they are determined. This information will be distributed to all users. Such updates will be tagged with date/time of entry.

Source Documents: STACCS UFD, Section 3.2.2.17.5; AGCCS SSS, Section 3.2.1.3.2.7.

Satisfaction Source: Map data base file and Standard Reference Files common function (see Section 15).

2.5.2.5 Display Map Overlays

<u>Description</u>: Users will be able to retrieve and display overlays to the SITMAP that show current operational and situational information in a graphic display. These will be dynamic displays--as information is changed in the data base, the change will automatically appear on the display. The user will be able to select from a list of available overlays and display multiple overlays simultaneously (e.g., both the enemy and friendly overlays

can be displayed at the same time). A user will be able to activate and deactivate the overlay creation process; pause and resume overlay creation; and move an overlay in front of, or behind, other overlays displayed on the screen. The user will also be able to manipulate the information in an overlay on the screen, including displaying status information on selected objects, filtering information according to overlay-specific filters, moving objects on the overlay, resizing objects, and displaying objects in front of, or behind, other objects on the screen. Screen manipulation of objects displayed in an overlay will not affect object-related information in the database. The user will also be able to remove overlays from the SITMAP and clear them from the data base.

The SITMAP will convey an operational portrayal of the battlefield, depicting as a battlefield graphic the current tactical situation of a force. The map will include the force's area of operation with associated battlefield geometry and control measures, plus overlays capable of showing status and activity in the following areas:

- Friendly units (all)
- Fire Support
- Intelligence/Electronic Warfare
- Air Defense
- Aviation
- Control Measures
- Combat Service Support
- Nuclear/Biological/Chemical
- Engineer
- Army Airspace Command and Control
- Signal

- Civil-Military
- Deployment
- Movement
- Military Police
- Bases.

The friendly situation will employ the symbology described in FM 101-5-1, Operational Terms and Symbols and the ACCS Message Catalog (ACCS-A3-500-004). [MCS UFD] Appendix I provides more detail on the information that each of the overlays should be able to convey. FLC-S/W will be able to display simultaneously any combination of overlay sets onto the basic Friendly situation. FLC-S/W will automatically prepare the Friendly Situation Displays for corps, division, divisional brigade, separate brigade, and armored cavalry regiment.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.4; MCS UFD, Sections 3.2.1.4.1.1.1.14, 3.2.1.4.1.1.1.14.8 & 3.2.1.4.1.1.1.14.9; AGCCS SSS, Section 3.2.1.3.2.5.

Satisfaction Source: Unit locations and status data for the friendly unit display from requirement 2.5.1. Overlays from OPLAN/OPORD/Annex common function (see Section 5) or other appropriate application.

2.5.2.5.1 Perform General Overlay Control Functions

Description: The application will provide the user with a capability to display complex graphical objects dynamically linked to either the data bases, files, or the graphics editor. Typical objects are: pie charts, bar charts, text charts, line charts, bullet charts, table charts, time lines, organizational charts, embedded graphic images (i.e., airfield image in a GIF or CGM format). When an overlay is activated, the user will be able to see a notification of the time the system requires to complete the acquisition and update of the overlay information. The SITMAP application will allow the user to toggle on or off the overlay STATUS Box. Typical data acquisition status indications are: data being received, overlay on, no data currently being received, overlay acquisition of data paused by user, and data acquisition failure.

Source Document: STACCS UFD, Section 3.2.2.17.4.1.

Satisfaction Source: System data bases and overlay data base file(s).

2.5.2.5.2 Print Overlays

<u>Description</u>: Users will be able to prepare overlays to scale covering more than one map sheet, of sufficient size to display a corps area of operations. The user will be able to print these overlays to a plotter and/or common hardware/software (CHS) standard printers.

Source Documents: STACCS UFD, Section 3.2.2.17.4.3; FBCB2 UFD, Sections 3.4.2.7.7 & 3.4.2.8.7; AGCCS SSS, Section 3.2.1.3.2.6.

Satisfaction Source: Overlay data base file(s).

2.5.2.5.3 Provide Overlay Computational Capabilities

<u>Description</u>: The user will be able to create an overlay that can perform or assess the following functions: group data into arrays and perform the following aggregate functions: min, max, sum, average, count; assess trigonometric and exponential functions; assess geographic functions [distance (point-list), area (point-list), contained within (point, point list) target point (point, bearing, distance)]; support the following data types: distance (KM, miles, NM, meters, feet), area (sq km, sq ft), volume (cubic meters, cubic feet), weight (tons, pounds, ounces, kg, grams, short/long tons), speed (MPH, KPH, miles per second, feet per second), duration (days, hours:minutes:seconds, minutes, hours), bearing (degrees, mils), angle (degrees, radian), temperature (F, C), and frequency (Hz, Khz, Mhz, Ghz); and support the following filter conditions: numeric (=,<,<=,>,>=,<>), text (>,>=,<,<=), set comparison (IN, NOT IN).

Source Document: STACCS UFD, Section 3.2.2.17.4.4.

Satisfaction Source: Map and overlay data base file(s).

2.5.2.5.4 Display Friendly Unit Overlay

<u>Description</u>: Users will be able to display overlays that show current operational and situational information about friendly units in the area of operation. Displayed information will include friendly unit identification code, unit name, nationality, location, readiness status of personnel, equipment, POL and ammunition, NBC data, commander's assessment, and the DTG for which the location and status information is valid. A user

will be able to activate and deactivate the friendly unit status overlay process; pause and resume overlay display; and move an overlay in front of, or behind, other overlays displayed on the screen. The user will also be able to manipulate the information in a friendly unit overlay on the screen, including displaying status information on selected objects, filtering information according to overlay-specific filters, moving objects on the overlay, resizing objects, and displaying objects in front of, or behind, other objects on the screen. Screen manipulation of objects displayed in an overlay will not affect object-related information in the friendly unit database. However, manipulation of an object's location will change the data base information. Additionally, for selected users, changes made to the overlay will also change the data base information.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.4.2.2; MCS UFD, Sections 3.2.1.4.1.1.14.1.2, 3.2.1.4.1.1.14.15 & 3.2.1.4.1.1.14.16; FBCB2 UFD, Sections 3.4.2.15.6 & 3.4.2.16.6.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement 2.5.1).

2.5.2.5.4.1 Compute Subunit Center of Mass

<u>Description</u>: Using subunit CP locations and sub-subunit locations, this function will calculate and store the subunit center of mass.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.2.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement 2.5.1).

2.5.2.5.4.2 Create the Friendly Unit Display

<u>Description</u>: This function will create the friendly unit status display of all subordinate platoon echelon and above unit locations, subunit CP locations, unit CP locations, and subunit center mass locations.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.1.3; FBCB2 UFD, Sections 3.4.2.15.1 & 3.4.2.16.1.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement 2.5.1).

2.5.2.5.4.3 Calculate Forecasted Unit Locations

<u>Description</u>: This function will calculate forecasted unit locations for subunits and sub-subunits (i.e., subordinate units one and two levels down) only.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.4.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement 2.5.1).

2.5.2.5.4.4 Create Friendly Track Overlay

<u>Description</u>: This function will create and store a friendly track overlay displaying previous and forecasted subunits and sub-subunits locations for use with the unit status overlay. This function will display the last three subunits and sub-subunit locations that are a user-defined distance apart. This function will display previous locations as a faded symbol connected with lines to each other and the current location. This function will display forecasted locations as a dashed symbol connected to the current location with a line.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.5.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement 2.5.1).

2.5.2.5.4.5 Modify the Friendly Unit Display

<u>Description</u>: This function will facilitate the user in modifying the friendly unit status display.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.6; FBCB2 UFD, Sections 3.4.2.15.2 &

3.4.2.16.2.

Satisfaction Source: User-defined.

2.5.2.5.4.6 Delete the Friendly Unit Display

<u>Description</u>: This function will delete friendly unit display data from a storage media.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.7; FBCB2 UFD, Section 3.4.2.15.5 &

3.4.2.16.5.

Satisfaction Source: Display data base file.

2.5.2.5.4.7 Store the Friendly Unit Display

Description: This function will store the friendly unit status display.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.1.8; FBCB2 UFD, Sections 3.4.2.15.4 &

3.4.2.16.4.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement

2.5.1).

2.5.2.5.4.8 Display Currency of Friendly Unit Status Data

<u>Description</u>: The user will be able to determine the currency of friendly unit status data. The friendly unit status data displayed on the SITMAP will be tagged with the date/time to depict how old the data is from the date of verification.

Source Document: STACCS UFD, Section 3.2.2.17.4.2.2.1.

Satisfaction Source: Unit locations and status data from friendly unit data base files (requirement

2.5.1).

2.5.2.5.5 Display Functional Overlays

<u>Description</u>: Users require the capability to create and display operational and tactical overlays that use standard military symbology and special symbology available from a user-customizable SITMAP symbol library, as well as user-generated symbols. Users will be able to transmit overlays to other users.

Source Document: STACCS UFD, Section 3.2.2.17.4.2.

Satisfaction Source: Other ABCS modules and systems.

2.5.2.5.5.1 Display Fire Support (FS) Overlays

<u>Description</u>: Users will be able to receive FS target overlays and FS weapons are overlay information from Advanced Field Artillery Tactical Data System (AFATDS). Users will also be able to store and delete FS overlays.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.1.3 & 3.2.1.4.1.1.1.14.1.4.

Satisfaction Source: AFATDS.

2.5.2.5.5.1.1 Receive FS Target Overlays

<u>Description</u>: Users will be able to receive FS target overlays and FS weapons are overlay information from AFATDS. FS target overlay information will contain plan fires and FS units supporting the force. FS weapons are overlay information will contain weapon coverage are information for FS units supporting the force.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.3.1, 3.2.1.4.1.1.3.1.1 & 3.2.1.4.1.1.1.3.1.2.

Satisfaction Source: AFATDS.

2.5.2.5.5.1.2 Store FS Overlays

Description: Users will be able to store FS overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.

Satisfaction Source: AFATDS.

2.5.2.5.5.1.3 Delete FS Overlays

<u>Description</u>: Users will be able to delete FS overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.3.3.

Satisfaction Source: FS overlay file(s).

2.5.2.5.5.2 Display Intelligence and Electronic Warfare (IEW) Overlays

<u>Description</u>: Users will be able to receive, display, store, and delete IEW overlays.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.1.4 & 3.2.1.4.1.1.1.14.1.5.

Satisfaction Source: All-Source Analysis System (ASAS).

2.5.2.5.5.2.1 Create IEW Overlays

<u>Description</u>: Users require the capability to create the IEW overlay displaying IEW units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.4.1.

Satisfaction Source: ASAS.

2.5.2.5.5.2.2 Modify IEW Overlays

<u>Description</u>: Users require the capability to modify the IEW overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.4.2.

Satisfaction Source: ASAS.

2.5.2.5.5.2.3 Receive IEW Overlays

<u>Description</u>: Users will be able to receive IEW overlay information from ASAS and/or G2/S2 staff section.

Source Document: MCS UFD, Section 3.2.1.4.1.1.4.5.

Satisfaction Source: ASAS.

2.5.2.5.5.2.4 Store IEW Overlays

Description: Users will be able to store IEW overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.4.4.

Satisfaction Source: ASAS.

2.5.2.5.5.2.5 Delete IEW Overlays

<u>Description</u>: Users will be able to delete IEW overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.4.3.

Satisfaction Source: IEW overlay file(s).

2.5.2.5.3 Display Air Defense (AD) Overlays

<u>Description</u>: Users will be able to receive AD overlays from Forward Area Air Defense Command, Control, Communications, and Intelligence (FAADC3I). Users will be able to store AD overlays and delete AD overlays identified by the user.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.1.5 & 3.2.1.4.1.1.14.1.6.

Satisfaction Source: FAADC3I.

2.5.2.5.3.1 Receive AD Overlays

Description: Users will be able to receive AD overlays from FAADC3I.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.1.

Satisfaction Source: FAADC3I.

2.5.2.5.3.2 Delete AD Overlays

Description: Users will be able to delete AD overlays identified by the user.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.

Satisfaction Source: AD overlay file(s).

2.5.2.5.3.3 Store AD Overlays

Description: Users will be able to store AD overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.3.

Satisfaction Source: FAADC3I.

2.5.2.5.4 Display Aviation (AVN) Overlays

<u>Description</u>: Users will be able to receive, display, store, and delete aviation overlays.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.1.6 & 3.2.1.4.1.1.14.1.7.

Satisfaction Source: AVN application.

2.5.2.5.4.1 Create AVN Overlays

<u>Description</u>: Users require the capability to create AVN overlays displaying AVN units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.6.1.

Satisfaction Source: AVN application.

2.5.2.5.5.4.2 Modify AVN Overlays

<u>Description</u>: Users require the capability to modify the AVN overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.6.2.

Satisfaction Source: AVN application.

2.5.2.5.4.3 Delete AVN Overlays

<u>Description</u>: Users will be able to delete user-identified aviation overlay information from storage media.

Source Document: MCS UFD, Section 3.2.1.4.1.1.6.3.

Satisfaction Source: AVN overlay data base file(s).

2.5.2.5.5.4.4 Store AVN Overlays

<u>Description</u>: Users will be able to store aviation overlay information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.6.4.

Satisfaction Source: AVN application.

2.5.2.5.4.5 Receive AVN Overlays

<u>Description</u>: Users will be able to receive aviation map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.6.5.

Satisfaction Source: AVN application.

2.5.2.5.5.5 Display Control Measures Overlays

<u>Description</u>: Users will be able to receive and display control measures overlays. Users will be able to store and delete control measures overlays.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.1.7 & 3.2.1.4.1.1.1.14.1.8.

Satisfaction Source: OPLAN/OPORD/Annex Generator application.

2.5.2.5.5.1 Create Control Measures Overlays

Description: Users require the capability to create the control measures overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.7.1.

Satisfaction Source: OPLAN/OPORD/Annex data base files.

2.5.2.5.5.2 Modify Control Measures Overlays

<u>Description</u>: Users require the capability to modify the control measures overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.7.2.

Satisfaction Source: Orders data base files.

2.5.2.5.5.3 Delete Control Measures Overlays

<u>Description</u>: Users will be able to delete user-identified control measures map graphics information from storage media.

Source Document: MCS UFD, Section 3.2.1.4.1.1.7.3.

Satisfaction Source: Control measures overlay data base file(s).

2.5.2.5.5.4 Store Control Measures Overlays

Description: Users will be able to store control measures map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.7.4.

Satisfaction Source: OPLAN/OPORD/Annex Generator common function (see Section 5).

2.5.2.5.5.5 Receive Control Measures Overlays

<u>Description</u>: Users will be able to receive control measures map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.7.5.

Satisfaction Source: OPLAN/OPORD/Annex Generator common function (see Section 5).

2.5.2.5.5.6 Display Combat Service Support (CSS) Overlays

<u>Description</u>: Users will be able to receive and display CSS overlays. Users will be able to store and delete CSS map graphics information.

Source Document: MCS UFD Sections 3.2.1.4.1.1.1.8 & 3.2.1.4.1.1.14.1.9.

Satisfaction Source: Combat Service Support Control System (CSSCS).

2.5.2.5.5.6.1 Create CSS Overlays

<u>Description</u>: Users require the capability to create CSS overlays displaying CSS units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.8.1.

Satisfaction Source: CSSCS.

2.5.2.5.6.2 Modify CSS Overlays

<u>Description</u>: Users require the capability to modify the CSS overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.8.2.

Satisfaction Source: CSSCS.

2.5.2.5.5.6.3 Delete CSS Overlays

<u>Description</u>: Users will be able to delete user-identified CSS map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.8.3.

Satisfaction Source: CSS overlay file(s).

2.5.2.5.6.4 Store CSS Overlays

<u>Description</u>: Users will be able to store CSS map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.8.4.

Satisfaction Source: CSSCS.

2.5.2.5.5.6.5 Receive CSS Overlays

device.

<u>Description</u>: Users will be able to receive CSS map graphics information from CSSCS or another

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.8.5.

Satisfaction Source: CSSCS.

2.5.2.5.5.7 Display NBC Overlays

Description: Users will be able to receive, display, store, and delete NBC overlays. Users will be able to display overlays that show current operational and situational information concerning the status, location, and contamination resulting from friendly and enemy chemical and nuclear strikes in the area of operation. For chemical strikes, displayed information will include strike serial number, the DTG at which the strike occurred, the type of chemical agent and its persistency, and the length of time for which the attack areas and the hazard areas are expected to remain dangerous. For nuclear strikes, displayed information will include strike serial number, the DTG at which the strike occurred, the location of the strike, the type of burst and its yield, and the strike's contamination areas. NBC overlays will also display the recommended MOPP level, maximum operational time in the contaminated area, and location of decontamination sites and chemical/biological sample collection control points. A user will be able to activate and deactivate the NBC overlays; pause and resume the overlay function; and move an overlay in front of, or behind, other overlays displayed on the screen. The user will also be able to manipulate the information in an NBC overlay on the screen, including displaying status information on selected objects, filtering information according to overlay-specific filters, moving objects on the overlay, resizing objects, and displaying objects in front of, or behind, other objects on the screen. Screen manipulation of objects displayed in an overlay will not affect object-related information in the NBC database.

<u>Source Documents</u>: STACCS UFD, Sections 3.2.2.17.4.2.4 & 3.2.2.17.4.2.5; MCS UFD, Sections 3.2.1.4.1.1.1.9 & 3.2.1.4.1.1.1.10.

Satisfaction Source: NBC Information common function (see Section 10).

2.5.2.5.5.7.1 Create NBC Overlays

<u>Description</u>: Users require the capability to create NBC overlays displaying NBC units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.1.

Satisfaction Source: NBC Information common function (see Section 10).

2.5.2.5.7.2 Modify NBC Overlays

<u>Description</u>: Users require the capability to modify the NBC overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.2.

Satisfaction Source: NBC Information common function (see Section 10).

2.5.2.5.5.7.3 Delete NBC Overlays

Description: Users will be able to delete user-identified NBC map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.3.

Satisfaction Source: NBC overlay data base file(s).

2.5.2.5.5.7.4 Store NBC Overlays

Description: Users will be able to store NBC map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.4.

Satisfaction Source: NBC Information common function (see Section 10).

2.5.2.5.5.7.5 Receive NBC Overlays

Description: Users will be able to receive NBC map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.5.

Satisfaction Source: NBC Information common function (see Section 10).

2.5.2.5.5.8 Display Engineer (ENG) Overlays

<u>Description</u>: Users will be able to receive, store, delete, and display ENG overlays. Users require a capability to display overlays that depict engineering geographic locations, infrastructures, units, assets, and activities that pertain to planned and ongoing engineer efforts, and geographic locations, identities, types, and status of obstacles within the area of responsibility (AOR). Specific required overlays include: (1) area damage control operations, (2) mobility, countermobility and survivability missions, (3) route reconnaissance information for MSR

maintenance planning, (4) combat engineer activities, e.g., preparation of hasty roads, bridges, and fords; river crossing operations with rafts, boats and bridges; emplacement of mines and booby traps; troop breaking of enemy obstacles and minefields; preparation of fortifications; construction and placement of deception devices; engineer reconnaissance and intelligence gathering; and the time required to complete an activity, (5) existing obstacles (those natural or cultural restrictions to movement that are part of the terrain when battle planning begins), (6) reinforcing obstacles (obstacles specifically constructed, emplaced, or detonated to tie together strength, and extend existing obstacles), and (7) combined obstacles (combined view of both the existing and the reinforcing obstacles).

<u>Source Documents</u>: STACCS UFD, Sections 3.2.2.17.4.2.13 & 3.2.2.17.4.2.16; MCS UFD, Sections 3.2.1.4.1.1.1.10 & 3.2.1.4.1.1.1.11.

Satisfaction Source: ENG application.

2.5.2.5.8.1 Create Engineer Overlays

<u>Description</u>: Users require the capability to create ENG overlays displaying ENG units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.10.1.

Satisfaction Source: ENG application.

2.5.2.5.5.8.2 Modify Engineer Overlays

Description: Users require the capability to modify the ENG overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.10.2.

Satisfaction Source: ENG application.

2.5.2.5.5.8.3 Delete Engineer Overlays

<u>Description</u>: Users will be able to delete user-identified ENG map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.10.3.

Satisfaction Source: ENG overlay data base file(s).

2.5.2.5.8.4 Store Engineer Overlays

<u>Description</u>: Users will be able to store ENG map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.10.4.

Satisfaction Source: ENG application.

2.5.2.5.5.8.5 Receive Engineer Overlays

Description: Users will be able to receive ENG map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.10.5.

Satisfaction Source: ENG application.

2.5.2.5.5.9 Display Army Airspace Command and Control (A2C2) Overlays

<u>Description</u>: Users will be able to receive and display A2C2 overlays. Users will be able to store and delete A2C2 map graphics information.

Source Document: MCS UFD, Sections 3.2.1.4.1.1.1.11 & 3.2.1.4.1.1.1.14.1.12.

Satisfaction Source: A2C2 application.

2.5.2.5.5.9.1 Create A2C2 Overlays

<u>Description</u>: Users require the capability to create A2C2 overlays displaying A2C2 units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.11.1.

Satisfaction Source: A2C2 application.

2.5.2.5.5.9.2 Modify A2C2 Overlays

Description: Users require the capability to modify the A2C2 overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.6.2.

Satisfaction Source: A2C2 application.

2.5.2.5.5.9.3 Receive A2C2 Overlays

<u>Description</u>: Users will be able to receive A2C2 map graphic information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.1.

Satisfaction Source: A2C2 application.

2.5.2.5.5.9.4 Delete A2C2 Overlays

<u>Description</u>: Users will be able to delete user-identified A2C2 map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.11.4.

Satisfaction Source: A2C2 overlay file(s).

2.5.2.5.5.9.5 Store A2C2 Overlays

<u>Description</u>: Users will be able to store A2C2 map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.11.5.

Satisfaction Source: A2C2 application.

2.5.2.5.5.10 Display Signal (SIG) Overlays

<u>Description</u>: Users will be able to receive, store, delete, and display signal overlays. The information management staff user requires a capability to display the following information on information management overlays: (1) the overall theater communications picture, (2) color-coded critical communications sites and links, (3) color-coded restoration priorities for theater communications sites and links, (4) color-coded theater communications sites and links that are deemed "show stoppers" by the commander, and (5) color-coded line of sight obstructions and dead space.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.4.2.10; MCS UFD, Sections 3.2.1.4.1.1.1.12 & 3.2.1.4.1.1.1.14.1.13.

Satisfaction Source: SIG application.

2.5.2.5.5.10.1 Create SIG Overlays

<u>Description</u>: Users require the capability to create SIG overlays displaying SIG units supporting the force and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.12.1.

Satisfaction Source: SIG application.

2.5.2.5.5.10.2 Modify SIG Overlays

<u>Description</u>: Users require the capability to modify the SIG overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.12.2.

Satisfaction Source: SIG application.

2.5.2.5.5.10.3 Delete SIG Overlays

<u>Description</u>: Users will be able to delete user-identified signal map graphics information for storage media.

Source Document: MCS UFD, Section 3.2.1.4.1.1.12.3.

Satisfaction: SIG overlay file(s).

2.5.2.5.5.10.4 Store SIG Overlays

Description: Users will be able to store signal map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.12.4.

Satisfaction Source: SIG application.

2.5.2.5.5.10.5 Receive SIG Overlays

Description: Users will be able to receive signal map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.12.5.

Satisfaction Source: SIG application.

2.5.2.5.5.11 Display Civil Affairs (CA) Overlays

Description: Users require a capability to generate overlays that depict geographic locations and status of units, supplies, assets, and infrastructure involved in disaster relief, civilian support, host nation, and humanitarian support operations. Specific required overlays include: (1) a damage assessment overlay that shows areas of damage, color-coded according to severity; (2) an operational overlay that shows distribution and support centers at both depot and relief distribution levels, and includes tent cities and unit areas of responsibility; (3) supply routes used to support the effort; (4) air and sea ports of entry into the area; (5) power networks, to include substation and relay sites, and location and status of power generation stations, (6) location and status of water sources and the water distribution network; (7) a political and military event overlay that shows the geographical location of significant events that have occurred in the AOR, (8) an overlay that displays historical and cultural property locations, (9) an overlay that displays locations and identifications of religious buildings, shrines, and consecrated sites, (10) locations and status of modes of transportation, to include railroads, highways, roads, ports, airfields, waterways, and motor vehicles and aircraft with the potential to support military operations, (11) status, identification, and locations of local supplies for civilian and military use, e.g., food, water, building materials, fuels,

and medical supplies, and (12) status and location of local government and commercial communications assets, to include telephone, radio, television, telegraph, satellite, postal, and other resources including power resources.

Source Document: STACCS UFD, Sections 3.2.2.17.4.2.11, 3.2.2.17.4.2.12 & 3.2.2.17.4.2.14.

Satisfaction Source: CA application.

2.5.2.5.5.11.1 Create CA Overlays

<u>Description</u>: Users require the capability to create CA overlays displaying CA units supporting the force and any map graphics.

Source Document: Common function.

Satisfaction Source: CA application.

2.5.2.5.5.11.2 Modify CA Overlays

<u>Description</u>: Users require the capability to modify the CA overlays.

Source Document: Common function.

Satisfaction Source: CA application.

2.5.2.5.5.11.3 Receive CA Overlays

Description: Users will be able to receive CA map graphic information.

Source Document: Common function.

Satisfaction Source: CA application.

2.5.2.5.5.11.4 Delete CA Overlays

Description: Users will be able to delete user-identified CA map graphics information.

Source Document: Common function.

Satisfaction Source: CA overlay data base file(s).

2.5.2.5.5.11.5 Store CA Overlays

<u>Description</u>: Users will be able to store CA map graphics information.

Source Document: Common function.

Satisfaction Source: CA application.

2.5.2.5.5.12 Display Deployment Overlays

Description: Users will be able to automatically receive updates from units during movement and be able to display overlays that show current operational and situational information concerning friendly units deploying from their home station into the area of operation. Displayed information will include friendly unit identification code, parent unit UIC, unit name, nationality, gaining command code (GCC), location, readiness status of personnel, equipment, POL and ammunition, estimated and actual DTG of the unit's arrival at its current location, estimated and actual DTG of the unit's departure from some indicated location, and the DTG for which the status information is valid. A user will be able to activate and deactivate the friendly unit force tracking overlay function; pause and resume the overlay function; and move an overlay in front of, or behind, other overlays displayed on the screen. The user will also be able to manipulate the information in a friendly unit overlay on the screen, including displaying status information on selected objects, filtering information according to overlay-specific filters, moving objects on the overlay, resizing objects, and displaying objects in front of, or behind, other objects on the screen. Screen manipulation of objects displayed in an overlay will not affect object-related information in the databases from which the data is drawn. The user will be able to display the locations of deploying subunits and own unit's liaison party, advance party, main body, and equipment locations.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.4.2.6; MCS UFD, Sections 3.2.1.4.1.1.13 & 3.2.1.4.1.1.14.1.14.

Satisfaction Source: From requirement 2.5.3, Monitor Battlefield Deployments.

2.5.2.5.5.12.1 Create Deployment Overlays

<u>Description</u>: Users require the capability to create deployment overlays displaying deploying units and any map graphics.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.4.

Satisfaction Source: Deployment data base files.

2.5.2.5.5.12.2 Modify Deployment Overlays

<u>Description</u>: Users require the capability to modify the deployment overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.5.

Satisfaction Source: Deployment data base files.

2.5.2.5.5.12.3 Delete Deployment Overlay

<u>Description</u>: This function will delete user-identified deployment overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.6.

Satisfaction Source: Deployment overlay data base file(s).

2.5.2.5.5.12.4 Receive Deployment Overlays

Description: This function will receive deployment overlay map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.7.

Satisfaction Source: From requirement 2.5.3, Monitor Battlefield Deployments..

2.5.2.5.5.12.5 Store Deployment Overlays

<u>Description</u>: This function will store deployment overlay map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.8.

Satisfaction Source: From requirement 2.5.3, Monitor Battlefield Deployments.

2.5.2.5.5.13 Display Movement Overlays

Description: Users require a capability to display overlays that depict the status and locations of routes, convoy missions, moving units, and control points for movement over roads and highways in the area of operations. Specific required overlays include: (1) locations and status of main supply routes (MSR) and traffic control points (TCP), showing color-coded MSR and check points; and (2) locations, numbers, and direction of movement of military stragglers, convoys, and civilian refugees. The user will able to display the origins of all convoy missions, including the start, end, and intermediate points for selected convoys. It will be possible for the user to select and review a single convoy from the total displayed, or to display subsets of all convoys based upon the following categories: (1) specific UIC, (2) mission ID, (3) mission number, (4) unit name, (5) convoys passing through a specified geographic location, and (6) convoys starting after a specified DTG, and arriving before a specified DTG.

Source Document: STACCS UFD, Section 3.2.2.17.2.15 & 3.2.2.17.4.2.17.

<u>Satisfaction Source</u>: Convoy Planning common function (see Section 8) and other Movements applications.

2.5.2.5.5.13.1 Create Movement Overlays

<u>Description</u>: Users require the capability to create movement overlays displaying movement control units supporting the force, convoys, and any map graphics.

Source Document: Common function.

Satisfaction Source: Movement data base files.

2.5.2.5.5.13.2 Modify Movement Overlays

<u>Description</u>: Users require the capability to modify the movement overlays.

Source Document: Common function

Satisfaction Source: Movement data base files.

2.5.2.5.5.13.3 Receive Movement Overlays

<u>Description</u>: Users will be able to receive movement map graphic information.

Source Document: Common function.

<u>Satisfaction Source</u>: Convoy Planning common function (see Section 8) and other Movements applications.

2.5.2.5.5.13.4 Delete Movement Overlays

<u>Description</u>: Users will be able to delete user-identified movement map graphics information.

Source Document: Common function.

Satisfaction Source: Movement overlay data base file(s).

2.5.2.5.5.13.5 Store Movement Overlays

<u>Description</u>: Users will be able to store movement map graphics information.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.5.

Satisfaction Source: Convoy Planning common function (see Section 8) and other Movements applications.

2.5.2.5.5.14 Display Military Police (MP) Overlays

<u>Description</u>: Users require a capability to display overlays that depict the status and locations of friendly military police units and host nation police and security elements. Specific required overlays include: (1) locations of force coordination points including but not limited to Starting Points (SP), Release Points (RP), and Check Points (CP), (2) locations of enemy prisoner of war/civilian internee captures exceeding a user-specified threshold, (3) locations of straggler control units and facilities and straggler control status information including but not limited to (235) Straggler status report (for each military police unit), (4) locations of enemy activity in rear areas, (5) locations and status of MSR and alternate MSR between unit supply points and the user-defined criticality of each main supply route based on the current operations plan, (6) the organization groupings for Rear Operations defense, including Bases and Base Clusters, (7) locations, identities and command posts of any users, including theater, joint and combined assets, of the terrain in the force's area of interest, (8) bridge classification information for each bridge, (9) locations of refugee control units, facilities, and status information, and (10) locations of serious incidents that require submission of a Serious Incident Report (SIR), under the provisions of AR 190-40, and status information. Provost marshal (PM)/MP and logistics staff users will also be able to display a SITMAP overlay that shows the locations and operational status of enemy prisoner of war (EPW) collecting points, holding areas, and camps. The display will show camp fill rates according to user-defined color codes and enemy prisoner of war/civilian internee status information including but not limited to enemy prisoner of war/civilian internee status report (for each military police unit). The overlay will use standard military symbology (source: AAP-6 and FM 101-5-1). The data source for all PM/MP information is the Military Police Automated Control System (MPACS) functional application.

Source Documents: STACCS UFD, Section 3.2.2.17.4.2.1; MCS UFD, Appendix I.

Satisfaction Source: MPACS.

2.5.2.5.5.14.1 Create MP Overlays

<u>Description</u>: Users require the capability to create MP overlays displaying MP units supporting the force and any map graphics.

Source Document: Common function.

Satisfaction Source: MPACS.

2.5.2.5.5.14.2 Modify MP Overlays

Description: Users require the capability to modify the MP overlays.

Source Document: Common function

Satisfaction Source: MPACS.

2.5.2.5.5.14.3 Receive MP Overlays

Description: Users will be able to receive MP map graphic information.

Source Document: Common function.

Satisfaction Source: MPACS.

2.5.2.5.5.14.4 Delete MP Overlays

Description: Users will be able to delete user-identified MP map graphics information.

Source Document: Common function.

Satisfaction Source: MP overlay data base file(s).

2.5.2.5.5.14.5 Store MP Overlays

<u>Description</u>: Users will be able to store MP map graphics information.

Source Document: Common function.

Satisfaction Source: MPACS.

2.5.2.5.5.15 Display Base Activity Overlays

Description: Users will be able to display overlays that show current operational and situational information concerning the location and status of selected bases in the area of operation and the units and activities located them. Displayed information will include base and unit number, activity, criticality, vulnerability, and threat situation. A user will be able to activate and deactivate the base overlay function; pause and resume the overlay function; and move an overlay in front of, or behind, other overlays displayed on the screen. The user will also be able to manipulate the information in a base activity overlay on the screen, including displaying status information on selected objects, filtering information according to overlay-specific filters, moving objects on the overlay, resizing objects, and displaying objects in front of, or behind, other objects on the screen. Screen manipulation of objects displayed in an overlay will not affect object-related information in the database.

Source Document: STACCS UFD, Sections 3.2.2.17.4.2.8 & 3.2.2.17.4.2.9.

Satisfaction Source: Base activity or engineer application.

2.5.2.5.5.15.1 Create Base Activity Overlays

<u>Description</u>: Users require the capability to create base activity overlays displaying bases supporting the force and any map graphics.

Source Document: Common function.

Satisfaction Source: Base activity or engineer application.

2.5.2.5.5.15.2 Modify Base Activity Overlays

<u>Description</u>: Users require the capability to modify the base activity overlays.

Source Document: Common function.

Satisfaction Source: Base activity or engineer application.

2.5.2.5.5.15.3 Receive Base Activity Overlays

<u>Description</u>: Users will be able to receive base activity map graphic information.

Source Document: Common function.

Satisfaction Source: Base activity or engineer application.

2.5.2.5.5.15.4 Delete Base Activity Overlays

<u>Description</u>: Users will be able to delete user-identified base activity map graphics information.

Source Document: Common function.

Satisfaction Source: Base activity overlay data base file(s).

2.5.2.5.5.15.5 Store Base Activity Overlays

Description: Users will be able to store base map graphics information.

Source Document: Common function.

Satisfaction Source: Base activity or engineer application.

2.5.2.5.6 Perform Overlay Filtering and Query

Description: The user will have the capability to create overlays that display a list of possible filtering conditions to the user. The display of the possible filters choices to the user are: a short list (less than 10 possibilities) or a long list (scrolled window of selectable items). These filters will allow the user to declutter and reclutter the map by, at a minimum: unit size, unit type, CSS units, combat support units, maneuver units, type of graphic, battlefield operating system (BOS), and overlay. Users will also be able to perform queries of data that appears on the SITMAP.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.4.5; MCS UFD, Sections 3.2.1.4.1.1.14.6 & .14.6.1-.8 & 3.2.1.4.1.1.14.7 & .14.7.1-.8; FBCB2 UFD, Sections 3.4.2.7.8 & 3.4.2.8.8.

Satisfaction Source: User-defined.

2.5.2.5.6.1 Perform Spatial Database Queries

Description: Users require a capability to perform spatial data base queries while in the overlay

mode. (A spatial data base query is a query based on a defined area on a map.) These spatial queries include area

locking queries, coordinate queries, containment queries, adjacency queries, proximity queries, boolean combinations

of queries, and spatial description queries.

Source Document: STACCS UFD, Section 3.2.2.17.4.5.1

Satisfaction Source: Overlay and map data base file(s).

2.5.2.5.6.2 Query SITMAP Display Environment

Description: Users will have a capability from within the overlay definition language to query the

SITMAP display environment (e.g., map sheet name, overlays, filter settings) and to control the SITMAP display

environment. The overlay definition language will have full standard query language (SQL) capabilities.

Source Document: STACCS UFD, Section 3.2.2.17.4.5.2.

Satisfaction Source: Overlay and map data base file(s).

2.5.2.5.6.3 Display Query Results

<u>Description</u>: While operating in the overlay mode, users will be able to perform queries and display

the results of multiple record queries within a scrollable window positioned within a status box. Users will be able

to select any of the resulting records and to use them as input to further overlay actions.

Source Document: STACCS UFD, Section 3.2.2.17.4.5.3.

Satisfaction Source: Overlay and map data base file(s).

2-50

Acquire Records by Triggering 2.5.2.5.6.4

Description: Users will have a capability to create overlays that trigger the acquisition of associated

records upon receipt of a primary record.

Source Document: STACCS UFD, Section 3.2.2.17.4.5.4.

Satisfaction Source: Overlay and map data base file(s).

2.5.2.5.6.5 Display Overlays from Multiple Sources

<u>Description</u>: Users require a capability to display overlays from multiple sources (multiple joins).

Source Document: STACCS UFD, Section 3.2.2.17.4.5.5.

Satisfaction Source: Overlay data base file(s).

2.5.2.6 Create/Edit Graphics Symbols

Description: The user requires the capability to draw objects on the SITMAP, using the graphics

editor, and to save these graphics to a file for later use, as desired. The user will be able to create objects, edit them,

move them on the screen, and manipulate them in terms of size, orientation and alignment. The user will also be

able to link objects drawn on the screen to values in any system database. Objects will link to screen or map

coordinate locations, colors, fill styles, line widths, text, or to a set of points on the map. Additionally, the user will

be able to generate operational symbols and decision graphics in accordance with FM 101-5-1, Operational Terms

and Symbols, from database entries.

Source Documents: STACCS UFD, Section 3.2.2.17.6; MCS UFD, Section 3.2.1.4.1.1.14.5;

FBCB2 UFD, Sections 3.4.2.7.1 & 3.4.2.8.1; AGCCS SSS, Section 3.2.1.3.2.6.

Satisfaction Source: User-defined.

2-51

2.5.2.7 Manage Standard Graphics Symbol Library

<u>Description</u>: The "symbols" system administrator will have the capability to modify symbols, add symbols, and update the standard symbol reference library. The updated symbol library will then be updated across the entire network.

Source Documents: STACCS UFD, Section 3.2.2.17.7; MCS UFD, Section 3.2.1.4.1.1.14.5; AGCCS SSS, Section 3.2.1.3.2.8.

Satisfaction Source: User-defined.

2.5.2.8 Display Three Dimensional View of Battlefield

<u>Description</u>: The system will display the SITMAP in a three-dimensional format.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.

<u>Satisfaction Source</u>: Map file, Terrain Evaluation Module (TEM), and the Terrain Evaluation common function (see Section 6).

2.5.2.8.1 Change Location of Viewer

<u>Description</u>: The system will assist the user in changing the location of the viewer.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.1.

<u>Satisfaction Source</u>: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.2 Change Altitude of Viewer

<u>Description</u>: The system will assist the user in changing the altitude of the viewer.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.14.10.2.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.3 Change Orientation of View

Description: The system will assist the user in changing the azimuth of the view.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.14.10.3.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.4 Change Vertical Exaggeration

<u>Description</u>: The system will assist the user in changing the ratio of horizonal to vertical exaggeration ratio.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.4.

<u>Satisfaction Source</u>: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.5 Change Time of Day View

<u>Description</u>: The system will display the SITMAP with appropriate shadowing, shading, and/or illumination from the sun/moon for a user-selected time and date.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.14.10.5.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.6 Display Transportation Network

<u>Description</u>: The system will display the transportation network, including but not limited to primary roads, secondary roads, unpaved roads, cuts/fills, and rail lines.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.6.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.7 Display Major Buildings

<u>Description</u>: The system will display built up areas, including major buildings in cities and towns.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.7.

<u>Satisfaction Source</u>: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.8 Display Vegetation

<u>Description</u>: The system will display vegetation.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.8.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.9 Display Hydrography

<u>Description</u>: The system will display hydrography, including but not limited to rivers, canals, streams, seas, lakes, swamps, and marshes.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.9.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.10 Display Bridges and Tunnels

<u>Description</u>: The system will display bridges and tunnels.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.10.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.11 Display Mountain Passes

Description: The system will display mountain passes.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.11.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.12 Display Beaches

Description: The system will display beaches.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.12.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.13 Display Coastlines

Description: The system will display coastlines.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.13.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.2.8.14 Display Elevation

Description: The system will display elevation information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.14

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.15 Display Grid Coordinate

Description: The system will display grid coordinate.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.15.

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.16 Display NBC/Smoke Coverage

Description: The system will display NBC/smoke coverage.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.16

Satisfaction Source: Map file, TEM, and the Terrain Evaluation common function (see Section

6).

2.5.2.8.17 Print Terrain Visual Display

<u>Description</u>: The system will print terrain visual display.

Source Document: MCS UFD, Section 3.2.1.4.1.1.14.10.17.

<u>Satisfaction Source</u>: Map file, TEM, and the Terrain Evaluation common function (see Section 6).

2.5.3 Monitor Battlefield Deployments

<u>Description</u>: This function will assist the force commander and staff in monitoring the force deployment from the home station to the area of interest. This function will display the locations of deploying subunits and own units liaison party, advance party, main body, and equipment locations.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.

<u>Satisfaction Source</u>: Worldwide automatic electronic feed from subordinate units. Platform-level source data entry for own unit data.

2.5.3.1 Receive Subunit Deployment Locations

<u>Description</u>: This function will receive subunits' deployment location from subordinate units.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.1.

Satisfaction Source: Worldwide automatic electronic feed from subordinate units.

2.5.3.2 Receive Own Unit Deployment Locations

<u>Description</u>: This function will receive force level unit locations from the current operations staff section (G3/S3).

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.2.

Satisfaction Source: Platform-level source data entry for own unit data.

2.5.3.3 Store Deployment Locations

<u>Description</u>: This function will store deployment locations.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.3.

<u>Satisfaction Source</u>: Worldwide automatic electronic feed from subordinate units. Platform-level source data entry for own unit data.

2.5.3.4 Add Deployment Locations

<u>Description</u>: This function will assist the user in creating a deployment overlay by automatically posting stored deployment locations.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.4.

<u>Satisfaction Source</u>: Worldwide automatic electronic feed from subordinate units. Platform-level source data entry for own unit data.

2.5.3.5 Update Deployment Locations

<u>Description</u>: This function will assist the user in modifying deployment overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.5.

<u>Satisfaction Source</u>: Worldwide automatic electronic feed from subordinate units. Platform-level source data entry for own unit data.

2.5.3.6 Delete Deployment Locations

<u>Description</u>: This function will delete user-identified deployment locations.

Source Document: MCS UFD, Section 3.2.1.4.1.1.13.6.

Satisfaction Source: Deployment locations data base file.

2.5.3.7 Query Deployment Locations

Description: This function will allow the user to construct queries of the unit deployment data

base files.

Source Document: Common function.

Satisfaction Source: Deployment data base file.

2.5.3.8 Distribute Deployment Locations

<u>Description</u>: This function will allow the user to transmit its deployment locations to other units..

Source Document: Common function.

Satisfaction Source: Deployment data base file.

2.5.3.9 Display Deployment Locations

<u>Description</u>: This function will allow the user to display unit deployment locations in a text format.

Source Document: Common function.

Satisfaction Source: Deployment data base file.

2.5.3.10 Print Deployment Locations

<u>Description</u>: This function will allow the user to print unit deployment locations.

Source Document: Common function.

Satisfaction Source: Deployment data base file.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 3

ENEMY SITUATION FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the enemy situation common user requirements.

3.1 FUNCTION NAME

Enemy Situation

3.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to monitor information concerning enemy forces and to perform intelligence preparation of the battlefield (IPB).

3.3 FUNCTION DESCRIPTION

The *Enemy Situation* function supports commanders and staffs (combat, combat support, and combat service support) in developing, projecting, and maintaining enemy force information. In addition, users will be able to maintain information on the recent, current, and probable movements of enemy units. Authorized users will be able to add new information, update old information, and delete outdated data. Enemy unit data will include a time tag so that the viewer can assess the timeliness of the data. Another feature will save the records of a selected enemy unit, thus maintaining a history of its activity. This function will be able to interoperate with the ASAS. It will facilitate battle command by automating enemy force assessment throughout the force projection cycle. Its products will enhance situational awareness and planning.

This function includes the capability to:

- Access location, activity, resource status, and other information of enemy units.
- Display enemy information in graphic and text formats on a map and/or map surrogate background.

- Generate a commander's intelligence summary (INTSUM) report.
- Generate an enemy kill board display.
- Develop and display projected enemy activity and status.
- Display the enemy relevant common picture.
- Manage Priority Intelligence Requirements (PIR) status.
- Perform IPB.
- Manage incident reporting.

Enemy force information will include at a minimum: enemy unit identification (including country of allegiance, unit name, number, branch, echelon, and description), enemy parent unit identification, current location, the date-time-group (DTG) when the enemy unit was sighted at the current location, current percent of unit strength (combat effectiveness), current unit activity, intent of the enemy unit, direction of the enemy unit, the source of the information, the validity of the information source, and the available history of the enemy unit, including its commander. The user will have access to projected enemy unit resource displays and summaries. Users will be able to create, modify/edit, receive, save, delete, display, print, query, and transmit enemy force information.

3.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.4.3.2 & 3.2.1.4.15.
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 2.4.6.1.2.3, 2.4.6.1.2.4, 3.2.1.1.5, 3.2.1.3.1.1.1, 3.2.1.4.1.1.1.2, 3.2.1.4.1.1.2 & 3.2.1.4.1.1.5.2.
- Standard Theater Army Command and Control System (STACCS) UFD, Sections 3.2.1.6,
 3.2.2.17.4.2.3 & 3.2.1.11.

Force XXI Battle Command Brigade and Below (FBCB2) UFD, Sections 3.4.3, 3.4.4, & 3.4.5.

3.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figures 3-1 through 3-7 depict the hierarchy of the user functional requirements.

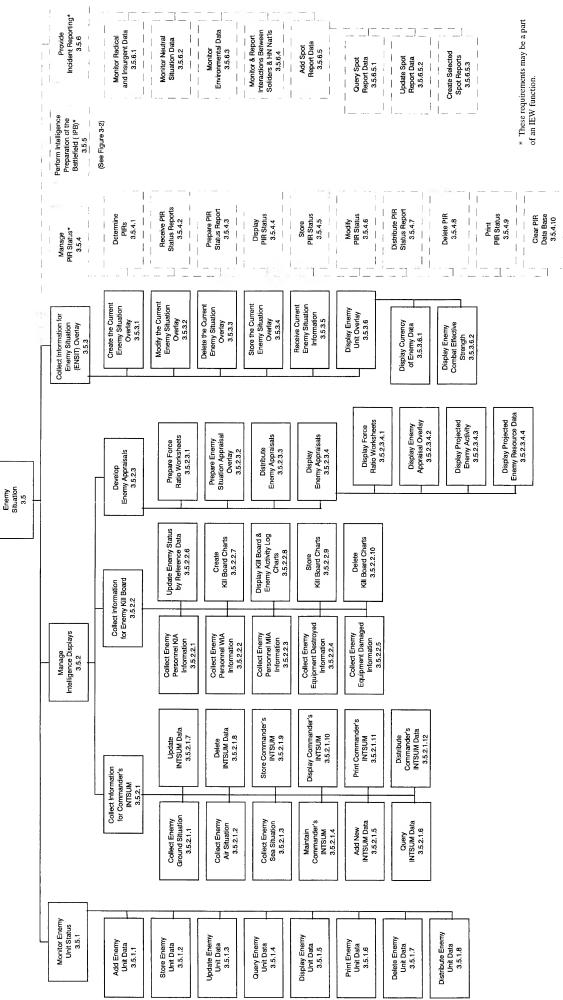
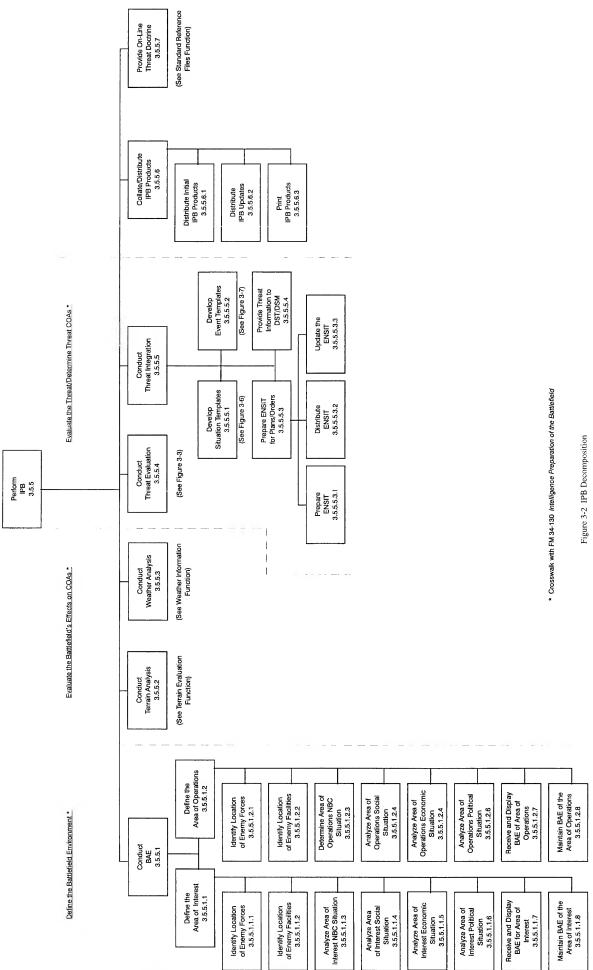


Figure 3-1 Enemy Situation Decomposition



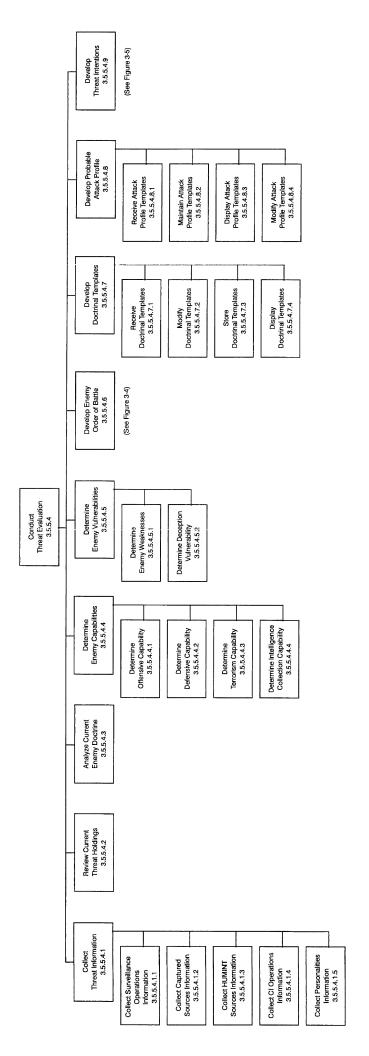


Figure 3-3 Conduct Threat Evaluation Decomposition

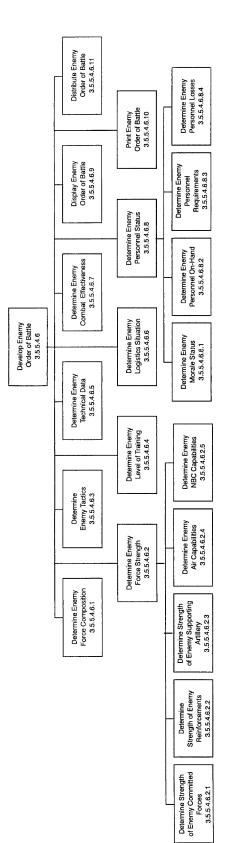


Figure 3-4 Develop Enemy Order of Battle Decomposition

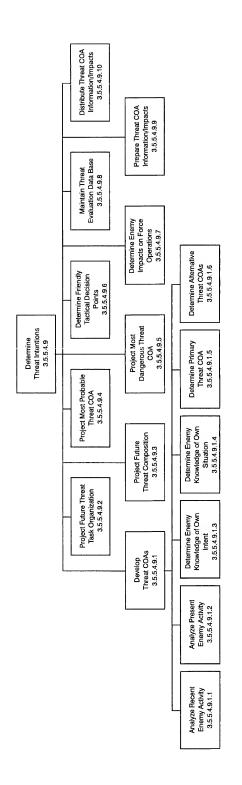


Figure 3-5 Determine Threat Intentions Decomposition

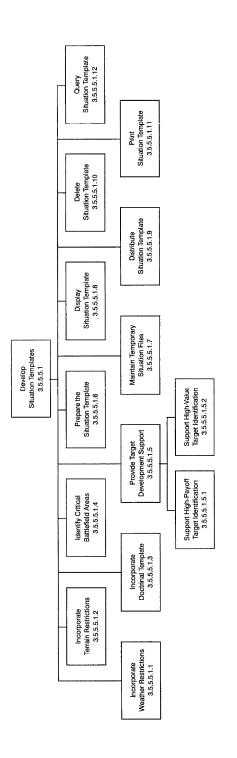


Figure 3-6 Develop Situation Templates Decomposition

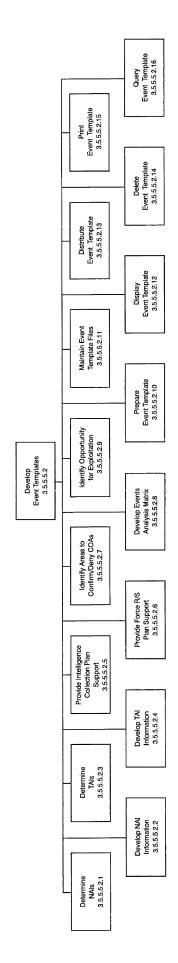


Figure 3-7 Develop Event Templates Decomposition

3.5.1 Monitor Enemy Unit Status

Description: The user requires an automated capability to develop and maintain information about the organization, strength, commanders, and locations of enemy units, and the manner in which these units are tactically (or administratively, in time of peace) deployed. In addition, the user will be able to maintain information on the recent, current, and probable movements of enemy units. Users will be able to query the data base for information in the following categories: (1) enemy unit identification (including country of allegiance, unit name, number, branch, level, and description, (2) enemy parent unit identification, (3) current location, and the DTG when the enemy unit was sighted at the current location, (4) current percent of unit strength (combat effectiveness), (5) current unit activity, (6) intent of enemy unit, (7) direction of enemy unit, (8) the source of the information, (9) the validity of information source, and (10) available history of the enemy unit, including its commander. Authorized users will be able to receive and add new information, update old information, delete outdated data, and store, display, print, and distribute data. Enemy unit data will include a time tag so that the viewer can assess the timeliness of the data, as well as a feature that will save the previous records of a selected unit, so that a history of activity can be maintained.

<u>Source Documents</u>: AGCCS SSS, Section 3.2.1.4.3.2; STACCS UFD, Sections 3.2.1.6, 3.2.1.6.1 & 3.2.1.6.2; MCS UFD Section 3.2.1.3.1.1.1.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.1.1 Add Enemy Unit Data

<u>Description</u>: Selected users require the capability to receive from higher headquarters, and add to the enemy data base, reference and status information about all enemy forces. Reference data that authorized users may add includes enemy unit country of allegiance; and unit name, number, branch, level, enemy parent unit name, activity and description. Status data that designated users will be able to add includes current friendly OPLAN; enemy unit name; enemy unit branch; unit description; enemy activity; CP location and effective DTG of sighting at that location; and estimated level of combat effectiveness.

<u>Source Documents</u>: STACCS UFD, Sections 3.2.1.6.1.1 & 3.2.1.6.1.2; MCS UFD, Section 3.2.1.3.1.1.1; FBCB2 UFD, Sections 3.4.5.8.1, 3.4.5.8.2, 3.4.5.9.1 & 3.4.5.9.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.1.2 Store Enemy Unit Data

Description: Users require the capability to store enemy unit data.

Source Documents: MCS UFD, Section 3.2.1.3.1.1.1.2; FBCB2 UFD, Sections 3.4.5.8.4 &

3.4.5.9.4.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.1.3 Update Enemy Unit Data

<u>Description</u>: Authorized users require the capability to update the enemy data base. Status data fields that authorized users will be able to update include current friendly OPLAN; enemy unit name; enemy unit branch; unit description; enemy activity; CP location and effective DTG of sighting at that location; and estimated level of combat effectiveness. Reference data that authorized users may update includes enemy unit country of allegiance; and unit name, number, branch, level, enemy parent unit name, and description.

<u>Source Documents</u>: STACCS UFD, Sections 3.2.1.6.1.3 & 3.2.1.6.2.3; FBCB2 UFD, Sections 3.4.5.8.3 & 3.4.5.9.3.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.1.4 Query Enemy Unit Data

<u>Description</u>: All users require the capability to query the enemy data base for reference and status information about all enemy forces. Status data fields that users will be able to query for include current friendly OPLAN; enemy unit name; enemy unit branch; unit description; unit activity: CP location and effective DTG of sighting at that location; and estimated level of combat effectiveness. Reference data that users may use as query fields includes enemy unit country of allegiance; and unit name, number, branch, level, enemy parent unit name, and description.

Source Documents: STACCS UFD, Sections 3.2.1.6.1.2 & 3.2.1.6.2.2; FBCB2 UFD, Sections 3.4.5.8.8 & 3.4.5.9.8.

3.5.1.5 Display Enemy Unit Data

<u>Description</u>: Users require the capability of displaying enemy unit data.

<u>Source Documents</u>: MCS UFD, Sections 2.4.6.1.2.3.1 & 3.2.1.3.1.1.1.3; FBCB2 UFD, Sections 3.4.5.8.6 & 3.4.5.9.6.

Satisfaction Source: Enemy situation data base files.

3.5.1.6 Print Enemy Unit Data

<u>Description</u>: Users require the capability of printing enemy unit data.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.3.1.1.1.4; FBCB2 UFD, Sections 3.4.5.8.7 & 3.4.5.9.7.

Satisfaction Source: Enemy situation data base files.

3.5.1.7 Delete Enemy Unit Data

<u>Description</u>: Authorized users require the capability to delete reference and status information from the enemy data base. Status data fields containing information that authorized users will be able to delete include current friendly OPLAN; enemy unit name; enemy unit branch; unit description; unit activity; CP location and effective DTG of sighting at that location; and estimated level of combat effectiveness. Reference data that authorized users may delete includes enemy unit country of allegiance; and unit name, number, branch, level, enemy parent unit name, and description.

<u>Source Documents</u>: STACCS UFD, Sections 3.2.1.6.1.4 & 3.2.1.6.2.4; MCS UFD, Section 3.2.1.3.1.1.1.5; FBCB2 UFD, Sections 3.4.5.8.5 & 3.4.5.9.5.

3.5.1.8 Distribute Enemy Unit Data

<u>Description</u>: Users require the capability to automatically distribute enemy unit data to subordinate units and other staff sections.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.3.1.1.1.6; FBCB2 UFD, Sections 3.4.5.8.9 & 3.4.5.9.9.

Satisfaction Source: Enemy situation data base files.

3.5.2 Manage Intelligence Displays

<u>Description</u>: Users require the capability to receive, update, store, and present intelligence displays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1 Collect Information for Commander's INTSUM

<u>Description</u>: Users require the capability to receive, update, store, and display commander's INTSUM information.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.2.1; FBCB2 UFD, Sections 3.4.5.7 & 3.4.5.8.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.1 Collect Enemy Ground Situation

<u>Description</u>: Users require the capability to receive enemy ground situation information through SPOT reports from subordinate units and battlefield operating system (BOS) managers, and INTSUM reports from higher headquarters.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.2.1.1; FBCB2 Sections 3.4.5.7.2 & 3.4.5.8.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.2 Collect Enemy Air Situation

<u>Description</u>: Users require the capability to receive enemy air situation information through SPOT reports from subordinate units and BOS managers, and INTSUM reports from higher headquarters.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.1.2; FBCB2 UFD, Sections 3.4.5.7.2 & 3.4.5.8.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.3 Collect Enemy Sea Situation

<u>Description</u>: Users require the capability to receive enemy sea situation information through SPOT reports from subordinate units and BOS managers, and INTSUM reports from higher headquarters.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.1.3; FBCB2 UFD, Sections 3.4.5.7.2 & 3.4.5.8.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.4 Maintain Commander's INTSUM

<u>Description</u>: Users require the capability to correlate SPOT report information and INTSUM report information into force-level INTSUM information. Users require the capability to store force-level INTSUM information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.1.4.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.5 Add New INTSUM Data

Description: Users require the capability to add new force-level INTSUM data.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.2.1.5; FBCB2 UFD, Section 3.4.5.7.1 &

3.4.5.8.1.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.6 Query INTSUM Data

<u>Description</u>: Users require the capability to query INTSUM data from higher headquarters and the common picture data base.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.2.1.6; FBCB2 UFD, Sections 3.4.5.7.8 & 3.4.5.8.8.

Satisfaction Source: Enemy Situation data base files.

3.5.2.1.7 Update INTSUM Data

Description: Users require the capability to update INTSUM data.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.2.1.7; FBCB2 UFD, Sections 3.4.5.7.3 &

3.4.5.8.3.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.1.8 Delete INTSUM Data

<u>Description</u>: Users require the capability to delete user-identified INTSUM data from storage media.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.1.8; FBCB2 UFD, Sections 3.4.5.7.5 & 3.4.5.8.5.

Satisfaction Source: Enemy Situation data base files.

3.5.2.1.9 Store Commander's INTSUM

<u>Description</u>: Users require the capability to store commander's INTSUM data.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.1.9; FBCB2 UFD, Sections 3.4.5.7.4 & 3.4.5.8.4.

Satisfaction Source: Enemy Situation data base files.

3.5.2.1.10 Display Commander's INTSUM

<u>Description</u>: Users require the capability to display force-level commander's INTSUM information in a user-defined format.

<u>Source Documents</u>: MCS UFD, Sections 2.4.6.1.2.3.3 & 3.2.1.4.1.1.2.1.10; FBCB2 UFD, Sections 3.4.5.7.6 & 3.4.5.8.6.

Satisfaction Source: Enemy Situation data base files.

3.5.2.1.11 Print Commander's INTSUM

<u>Description</u>: Users require the capability to print force-level commander's INTSUM information using available hardware and software.

Source Document: FBCB2 UFD, Sections 3.4.5.7.7 & 3.4.5.8.7.

Satisfaction Source: Enemy Situation data base files.

3.5.2.1.12 Distribute Commander's INTSUM Data

<u>Description</u>: Users require the capability to distribute force-level commander's INTSUM information to subordinate units.

Source Document: FBCB2 UFD, Sections 3.4.5.7.9 & 3.4.5.8.9.

Satisfaction Source: Enemy Situation data base files.

3.5.2.2 Collect Information for Enemy Kill Board

<u>Description</u>: Users require the capability to receive enemy kill board (i.e., a listing of attrited enemy forces) information from subordinate units and higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.1 Collect Enemy Personnel Killed In Action (KIA) Information

<u>Description</u>: Users require the capability to receive enemy personnel KIA data from subordinate units and/or higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.1.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.2 Collect Enemy Personnel Wounded In Action (WIA) Information

<u>Description</u>: Users require the capability to receive enemy personnel WIA data from subordinate units and/or from higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.2.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.3 Collect Enemy Personnel Missing In Action (MIA) Information

<u>Description</u>: Users require the capability to receive enemy MIA data from subordinate units and/or from higher headquarters.

Source Document:

MCS UFD, Section 3.2.1.4.1.1.2.2.3.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.4 Collect Enemy Equipment Destroyed Information

<u>Description</u>: Users require the capability to receive enemy equipment destroyed data from subordinate units and/or from higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.4.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.5 Collect Enemy Equipment Damaged Information

<u>Description</u>: Users require the capability to receive enemy equipment damaged data from subordinate units and/or from higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.5.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.6 Update Enemy Status by Reference Data

<u>Description</u>: Users require the capability to store kill board data using enemy units' identification as reference data.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.6.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.2.2.7 Create Kill Board Charts

<u>Description</u>: Users require the capability to create kill board charts using kill board information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.7.

Satisfaction Source: Enemy Situation data base files.

3.5.2.2.8 Display Kill Board Charts

<u>Description</u>: Users require the capability to display kill board information in a user-defined format.

Source Document: MCS UFD, Sections 2.4.6.1.2.3.1 & 3.2.1.4.1.1.2.2.8.

Satisfaction Source: Enemy Situation data base files.

3.5.2.2.9 Store Kill Board Charts

<u>Description</u>: Users require the capability to store kill board charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.9.

Satisfaction Source: Enemy Situation data base files.

3.5.2.2.10 Delete Kill Board Charts

<u>Description</u>: Users require the capability to delete user-identified charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.2.10.

Satisfaction Source: Enemy Situation data base files.

3.5.2.3 Develop Enemy Appraisals

<u>Description</u>: Users require the capability to prepare force ratio worksheets and enemy situation appraisal overlays. Users also require the capability to display and distribute the enemy appraisals to any node that requests them.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.3

Satisfaction Source: Enemy Situation and Friendly Unit data base files.

3.5.2.3.1 Prepare Force Ratio Worksheets

<u>Description</u>: Users require the capability to prepare force ratio worksheets.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.3.1

Satisfaction Source: Enemy Situation and Friendly Unit data base files.

3.5.2.3.2 Prepare Enemy Situation Appraisal Overlays

<u>Description</u>: Users require the capability to prepare enemy situation appraisal overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.3.2.

Satisfaction Source: Enemy Situation data base files.

3.5.2.3.3 Distribute Enemy Appraisals

<u>Description</u>: Users require the capability to distribute force ratio worksheets and enemy situation appraisal overlays to any node that requests them.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.3.4.

Satisfaction Source: Enemy Situation data base files.

3.5.2.3.4 Display Enemy Appraisals

<u>Description</u>: Users require the capability to display the force ratio worksheets and enemy situation appraisal overlays.

Source Document: MCS UFD, Section 3.2.1.4.1.1.2.3.3.

Satisfaction Source: Enemy Situation and Friendly Unit data base files.

3.5.2.3.4.1 Display Force Ratio Worksheets

<u>Description</u>: Users require the capability to display the force ratio worksheets.

Source Document: MCS UFD, Section 2.4.6.1.2.4.

Satisfaction Source: Enemy Situation and Friendly Unit data base files.

3.5.2.3.4.2 Display Enemy Appraisal Overlay

<u>Description</u>: Users require the capability to display the enemy situation appraisal overlay.

Source Document: MCS UFD, Section 2.4.6.1.2.3.2.

Satisfaction Source: Enemy Situation data base files.

3.5.2.3.4.3 Display Projected Enemy Activity

<u>Description</u>: Users require the capability to display projected enemy activity information.

Source Document: MCS UFD, Section 2.4.6.1.2.3.2.

Satisfaction Source: Enemy Situation data base files.

3.5.2.3.4.4 Display Projected Enemy Resource Data

<u>Description</u>: Users require the capability to display projected enemy resource data.

Source Document: MCS UFD, Section 2.4.6.1.2.3.2.

3.5.3 Collect Information for Enemy Situation (ENSIT) Overlay

<u>Description</u>: Users require the capability to receive, create, modify, delete, and store the current ENSIT overlay.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.2; FBCB2 UFD, Sections 3.4.3.7. & 3.4.3.8.

Satisfaction Source: Enemy Situation data base files.

3.5.3.1 Create the Current Enemy Situation Overlay

<u>Description</u>: Users require the capability to create a current ENSIT overlay displaying known enemy locations and projected enemy map graphics.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.1; FBCB2 UFD, Sections 3.4.3.7.1 & 3.4.3.8.1.

Satisfaction Source: Enemy Situation data base files.

3.5.3.2 Modify the Current Enemy Situation Overlay

<u>Description</u>: Users require the capability to modify the current ENSIT overlay.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.2; FBCB2 UFD, Sections 3.4.3.7.3 & 3.4.3.8.3.

Satisfaction Source: Enemy Situation data base files.

3.5.3.3 Delete the Current Enemy Situation Overlay

<u>Description</u>: Users require the capability to delete the current ENSIT overlay.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.3; FBCB2 UFD, Sections 3.4.3.7.5 & 3.4.3.8.5.

Satisfaction Source: Enemy Situation data base files.

3.5.3.4 Store the Current Enemy Situation Overlay

Description: Users require the capability to store the current ENSIT overlay.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.1.2.4; FBCB2 UFD, Sections 3.4.3.7.4 & 3.4.3.8.4.

Satisfaction Source: Enemy Situation data base files.

3.5.3.5 Receive Current Enemy Situation Information

<u>Description</u>: Users require the capability to receive current ENSIT information from higher headquarters or G-2/S-2 staff section.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.2.5; FBCB2 UFD, Sections 3.4.3.7.2 & 3.4.3.8.2.

Satisfaction Source: Higher headquarters and G-2/S-2.

3.5.3.6 Display Enemy Unit Overlay

<u>Description</u>: Users will be able to display overlays that show current operational and situational information about enemy units in the area of operation. Displayed information will include enemy unit identification, nationality, location, and estimated combat effectiveness. A user will be able to activate and deactivate the enemy unit overlay process; pause and resume the overlay function; and move an overlay in front of, or behind, other overlays displayed on the screen. The user will also be able to manipulate the information in an enemy unit overlay on the screen, including displaying status information on selected objects, filtering information according to overlay-specific filters, moving objects on the overlay, resizing objects, and displaying objects in front of, or behind, other objects on the screen. Screen manipulation of objects displayed in an overlay will not affect object-related information in the enemy data base.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.17.4.2.3; MCS UFD, Sections 2.4.6.1.2.3.1 & 3.2.1.4.1.1.14.1.3; FBCB2 UFD, Sections 3.4.3.7.6 & 3.4.3.8.6.

Satisfaction Source: Enemy Situation data base files.

3.5.3.6.1 Display Currency of Enemy Data

<u>Description</u>: The user will have the capability to see the currency of the enemy data displayed on the SITMAP. The enemy data will be tagged with the date/time to depict the length of time elapsed since the time of last sighting.

Source Document: STACCS UFD, Section 3.2.2.17.4.2.3.1.

Satisfaction Source: Enemy Situation data base files.

3.5.3.6.2 Display Enemy Combat Effective Strength

<u>Description</u>: The user will be able to see displayed on the SITMAP a gage reflecting the combat effective strength of each enemy unit.

Source Document: STACCS UFD, Section 3.2.2.17.4.2.3.2.

Satisfaction Source: Enemy Situation data base files.

3.5.4 Manage PIR Status

<u>Description</u>: Users require the capability to receive, display, store, print, and distribute PIR status reports. The user will be able to prepare and modify the PIR status reports. Users also require the capability to clear PIR status information from the data base.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.5.2; AGCCS SSS, Section 3.2.1.4.15.3.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.4.1 Determine PIRs

<u>Description</u>: Users require an automated capability to analyze the operation plan or order to determine the PIRs and other intelligence requirements for each phase of the planned operation. Typical intelligence

requirements include enemy capabilities, possible enemy courses of action, and characteristics of the battlefield environment that will significantly affect the commander's tactical decision.

Source Document: STACCS UFD, Section 3.2.2.4.2.4.

Satisfaction Source: Orders data base files.

3.5.4.2 Receive PIR Status Reports

<u>Description</u>: Users require the capability to receive PIR status reports from subordinate units and/or higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.1.

Satisfaction Source: ASAS, G-2/S-2, and subordinate units.

3.5.4.3 Prepare PIR Status Report

Description: Users require the capability to prepare a PIR status report.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.2.

Satisfaction Source: Enemy Situation data base files.

3.5.4.4 Display PIR Status

<u>Description</u>: Users require the capability to display PIR status report information in a useable format.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.3.

3.5.4.5 Store PIR Status

<u>Description</u>: Users require the capability to store PIR status information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.4.

Satisfaction Source: Enemy Situation data base files.

3.5.4.6 Modify PIR Status

Description: Users require the capability to modify the PIR status report.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.5.

Satisfaction Source: Enemy Situation data base files.

3.5.4.7 Distribute PIR Status Report

<u>Description</u>: Users require the capability to distribute PIR status reports to other staff sections and higher headquarters.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.6.

Satisfaction source: Enemy Situation data base files.

3.5.4.8 Delete PIR

<u>Description</u>: Users require the capability to delete user-identified PIR status reports.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.7.

3.5.4.9 Print PIR Status

Description: Users require the capability to print PIR status reports.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.8.

Satisfaction source: Enemy Situation data base files.

3.5.4.10 Clear PIR Data Base

Description: Users require the capability to clear PIR information from storage.

Source Document: MCS UFD, Section 3.2.1.4.1.1.5.2.9.

Satisfaction Source: Enemy Situation data base files.

3.5.5 Perform Intelligence Preparation of the Battlefield (IPB)

<u>Description</u>: Users require the capability to conduct the IPB process, which addresses battlefield area evaluation, terrain analysis, weather analysis, threat evaluation, and threat integration.

Source Document: MCS UFD, Section 3.2.1.1.5

Satisfaction Source: Enemy Situation data base files.

3.5.5.1 Conduct Battlefield Area Evaluation (BAE)

Description: Users require a capability to evaluate data concerning the area of operations, which includes messages and reports concerning the physical, social, health, science, and technology characteristics of the subject area. The intelligence staff (G-2/S-2) prepares the BAE as part of the IPB process. BAE addresses collection and analysis of maps and climatological studies and analyzes local conditions and demography.

Source Documents: MCS UFD, Section 3.2.1.1.5.1; STACCS UFD, Section 3.2.2.19.1; STACCS UFD, Section 3.2.1.4.21.1.

Satisfaction Source: Enemy Situation data base and standard reference files (see Section 15).

3.5.5.1.1 Define the Area of Interest

<u>Description</u>: Users require the capability to determine the area of interest based on the commander's guidance. The area of interest includes all enemy activities that might affect the friendly force

throughout the time of operation. It is measured in the four dimensions of width, depth, height in airspace, and time.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1

Satisfaction Source: Enemy Situation data base and standard reference files (see Section 15).

3.5.5.1.1.1 Identify Location of Enemy Forces in the Area of Interest

<u>Description</u>: Users require the capability to identify locations of known enemy forces within the area of interest through reference to overlays, maps, and previously published documents. The function will update the ENSIT overlay using the most current reports, INTSUMs, periodic intelligence reports (PERINTREPs), aerial

photography, etc.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.1.2 Identify Location of Enemy Facilities in the Area of Interest

<u>Description</u>: Users require the capability to identify locations of known enemy facilities within the area of interest through reference to overlays, maps, and previously published documents. The function will update

the ENSIT overlay using the most current reports, INTSUMs, PERINTREPs, aerial photography, etc.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.2.

3.5.5.1.1.3 Analyze Area of Interest NBC Situation

<u>Description</u>: Users require the capability to estimates the number, type, yield, and delivery means of enemy nuclear weapons and chemical and biological munitions or agents available to the enemy that may affect friendly forces within the Area of Interest. The user will analyze the terrain to determine the effects of these weapons on friendly and enemy capabilities.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.3

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.1.4 Analyze Area of Interest Social Situation

<u>Description</u>: Users require the capability to analyze the social situation in the area of interest to determine impacts on friendly and enemy operations.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.4

Satisfaction Source: Standard reference files common function (see Section 15).

3.5.5.1.1.5 Analyze Area of Interest Economic Situation

<u>Description</u>: Users require the capability to analyze the economic situation in the area of interest to determine impacts on friendly and enemy operations.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.5.

Satisfaction Source: Standard reference files common function (see Section 15).

3.5.5.1.1.6 Analyze Area of Interest Political Situation

<u>Description</u>: Users require the capability to analyze the political situation in the area of interest to determine impacts on friendly and enemy operations.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.6.

Satisfaction Source: Standard reference files common function (see Section 15).

3.5.5.1.1.7 Receive and Display BAE of the Area of Interest

<u>Description</u>: Users require the capability to receive the BAE of the area of interest in a user-defined format. The BAE is displayed in a user-defined format.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.7.

Satisfaction Source: Higher headquarters G-2/S-2.

3.5.5.1.1.8 Maintain BAE of the Area of Interest

<u>Description</u>: The user requires the capability to electronically store, retrieve, modify, update, and display the BAE of the area of interest.

Source Document: MCS UFD, Section 3.2.1.1.5.1.1.8.

Satisfaction Source: Higher G-2/S-2.

3.5.5.1.2 Define the Area of Operations

<u>Description</u>: Users require the capability to divide the area of operations into three distinct areas of deep, close, and rear.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.

<u>Satisfaction Source</u>: Enemy Situation data base and standard reference files common function (see Section 15).

3.5.5.1.2.1 Identify Location of Enemy Forces in the Area of Operations

<u>Description</u>: The user requires the capability to identify locations of known enemy forces within the area of operations through reference to overlays, maps, and previously published documents. The user can update the ENSIT overlay using the most current reports, INTSUMs, PERINTREPs, aerial photography, etc.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.2.2 Identify Location of Enemy Facilities in the Area of Operations

<u>Description</u>: The user requires the capability to identify locations of known enemy facilities within the area of operations through reference to overlays, maps, and previously published documents. The user can update

the ENSIT overlay using the most current reports, INTSUMs, PERINTREPs, aerial photography, etc.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.2.3 Analyze Area of Operations NBC Situation

<u>Description</u>: The user requires the capability to estimate the number, type, yield, and delivery means of enemy nuclear weapons and chemical and biological munitions or agents available to the enemy that may

affect friendly forces within the area of operations. Users can analyze the terrain to determine the effects of these

weapons on friendly and enemy capabilities.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.2.4 Analyze Area of Operations Social Situation

Description: The user requires the capability to analyze the social situation in the area of operations

to determine impacts on friendly and enemy operations.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.4.

Satisfaction Source: Standard reference files common function (see Section 15).

3-30

3.5.5.1.2.5 Analyze Area of Operations Economic Situation

<u>Description</u>: The user requires the capability to analyze the economic situation in the area of operations to determine impacts on friendly and enemy operations.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.5.

Satisfaction Source: Standard reference files common function (see Section 15).

3.5.5.1.2.6 Analyze Area of Operations Political Situation

<u>Description</u>: The user requires the capability to analyze the political situation in the area of operations to determine impacts on friendly and enemy operations.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.6.

Satisfaction Source: Standard reference files common function (see Section 15).

3.5.5.1.2.7 Receive/Display BAE of the Area of Operations

<u>Description</u>: The user requires the capability to receive the BAE of the area of operations in a user-defined format. The BA is displayed in a user-defined format.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.7.

Satisfaction Source: Higher headquarters G-2/S-2.

3.5.5.1.2.8 Maintain BAE of the Area of Operations

<u>Description</u>: The user requires the capability to electronically store, retrieve, modify, update, and display the BAE of the area of interest.

Source Document: MCS UFD, Section 3.2.1.1.5.1.2.8.

Satisfaction Source: Higher headquarters G-2/S-2.

3.5.5.2 Conduct Terrain Analysis

<u>Description</u>: The user requires the capability to conduct terrain analysis of the area of operations and the area of interest.

Source Document: MCS UFD, Section 3.2.1.1.5.2.

Satisfaction Source: See the Terrain Evaluation common function, Section 6.

3.5.5.3 Conduct Weather Analysis

<u>Description</u>: Users require the capability to conduct weather analyses for the force using input from the Air Weather Service (AWS) and higher-echelon intelligence channels.

Source Document: MCS UFD, Section 3.2.1.1.5.3.

Satisfaction Source: See the Weather Information common function, Section 11.

3.5.5.4 Conduct Threat Evaluation

Description: The user requires the capability to conduct evaluation of threat (enemy) forces.

Source Documents: MCS UFD, Section 3.2.1.1.5.4; AGCCS SSS, Section 3.2.1.4.15.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.1 Collect Threat Information

Description: The user requires the capability to collect information on the threat for evaluation.

Source Document: MCS UFD, Section 3.2.1.1.5.4.1

3.5.5.4.1.1 Collect Surveillance Operations Information

<u>Description</u>: The user requires the capability to collect information on the threat from elements and sources involved in surveillance operations.

Source Document: MCS UFD, Section 3.2.1.1.5.4.1.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.1.2 Collect Captured Sources Information

<u>Description</u>: The user requires the capability to collect information on the threat from elements and sources involved in captured sources.

Source Document: MCS UFD, Section 3.2.1.1.5.4.1.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.1.3 Collect Human Intelligence (HUMINT) Sources Information

<u>Description</u>: The user requires the capability to collect information on the threat from elements and sources involved in HUMINT operations.

Source Document: MCS UFD, Section 3.2.1.1.5.4.1.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.1.4 Collect Counterintelligence (CI) Operations Information

<u>Description</u>: The user requires the capability to collect information on the threat from elements and sources involved in CI operations.

Source Document: MCS UFD, Section 3.2.1.1.5.4.1.4.

3.5.5.4.1.5 Collect Personalities Information

<u>Description</u>: The user requires the capability to collect information on threat personalities from intelligence channels.

Source Document: MCS UFD, Section 3.2.1.1.5.4.1.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.2 Review Current Threat Holdings

<u>Description</u>: The user requires the capability to review current threat holdings and dispositions. Dispositions are graphically depicted on the enemy situation overlay.

Source Document: MCS UFD, Section 3.2.1.1.5.4.2.

Satisfaction Source: Enemy Situation display.

3.5.5.4.3 Analyze Current Enemy Doctrine

<u>Description</u>: The user requires the capability to analyze current enemy doctrine compiled from published enemy documents and INTSUMs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.3.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.4 Determine Enemy Capabilities

<u>Description</u>: The user requires the capability to determine enemy capabilities through analysis of enemy offensive, defensive, and terrorism capabilities.

Source Document: MCS UFD, Section 3.2.1.1.5.4.4.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.4.1 Determine Offensive Capability

<u>Description</u>: The user requires the capability to determine enemy offensive capabilities through analysis of enemy composition and organization, strengths, dispositions, tactical doctrine, weapons and equipment, supporting enemy capabilities, and how doctrine and equipment apply in the present battlefield environment.

Source Document: MCS UFD, Section 3.2.1.1.5.4.4.1.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.4.2 Determine Defensive Capability

<u>Description</u>: The user requires the capability to determine enemy defensive capabilities through analysis of enemy composition and organization, strengths, dispositions, tactical doctrine, weapons and equipment, supporting enemy capabilities, and how doctrine and equipment apply in the present battlefield environment.

Source Document: MCS UFD, Section 3.2.1.1.5.4.4.2.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.4.3 Determine Terrorism Capability

<u>Description</u>: The user requires the capability to determine enemy terrorism capabilities through analysis of enemy composition and organization, doctrine, weapons and equipment, historical precedence, political policies and objectives, area of operation social, economic, and political situations, and vulnerabilities of friendly forces.

Source Document: MCS UFD, Section 3.2.1.1.5.4.4.3.

<u>Satisfaction Source</u>: Enemy Situation data base, on-line threat doctrine files, and standard reference files common function (see Section 15).

3.5.5.4.4.4 Determine Enemy Intelligence Collection Capability

<u>Description</u>: The user requires the capability to determine enemy intelligence collection capabilities through analysis of enemy composition and organization, tactical doctrine, weapons and equipment, supporting enemy capabilities, how doctrine and equipment apply in the present battlefield environment, and vulnerabilities of friendly forces.

Source Document: MCS UFD, Section 3.2.1.1.5.4.4.4.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.5 Determine Enemy Vulnerabilities

<u>Description</u>: The user requires the capability to determine enemy vulnerabilities through analysis of enemy weaknesses and vulnerabilities to friendly deception operations.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.5; AGCCS SSS, Section 3.2.1.4.15.3.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.5.1 Determine Enemy Weaknesses

<u>Description</u>: The user requires the capability to determine enemy weaknesses through analysis of enemy composition and organization, strengths, losses, morale, disposition, tactical doctrine, weapons and equipment, supporting enemy capabilities, and logistics situation.

Source Document: MCS UFD, Section 3.2.1.1.5.4.5.1.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.5.2 Determine Enemy Deception Vulnerability

<u>Description</u>: The user requires the capability to determine enemy vulnerabilities to friendly deception operations through analysis of enemy disposition, strength, tactical doctrine, offensive and defensive capabilities, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.5.2.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.6 Develop Enemy Order of Battle

<u>Description</u>: The user requires the capability to develop the enemy the order of battle through analysis of enemy force compositions, dispositions, strengths, tactics, training, technical data, logistics situation, combat effectiveness, and personnel.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.6.1 Determine Enemy Force Composition

<u>Description</u>: The user requires the capability to determine the enemy force composition through analysis of published documents, INTSUMs, and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.2 Determine Strength of Enemy Force

<u>Description</u>: The user requires the capability to determine the enemy force strength through analysis of the strengths of the enemy committed force, reinforcements, supporting artillery, and air and NBC capabilities.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.3.

3.5.5.4.6.2.1 Determine Strength of Enemy Committed Force

<u>Description</u>: The user requires the capability to determine enemy committed force strengths through analysis of ground maneuver units currently in contact and those with which imminent contact can be expected.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.3.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.2.2 Determine Strength of Enemy Reinforcements

<u>Description</u>: The user requires the capability to determine enemy reinforcement strengths through analysis of ground maneuver units that may or may not be employed against friendly forces, depending on specific friendly COA and enemy plans.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.3.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.2.3 Determine Strength of Enemy Supporting Artillery

<u>Description</u>: The user requires the capability to determine enemy supporting artillery strength through analysis of artillery units identified as being committed or reinforcing.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.3.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.2.4 Determine Enemy Air Capabilities

<u>Description</u>: The user requires the capability to determine enemy air capabilities through analysis of number and type of enemy aircraft within operational radius, taking into consideration number of possible sorties per day per aircraft.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.3.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.2.5 Determine Enemy NBC Capabilities

<u>Description</u>: The user requires the capability to determine enemy NBC capabilities through analysis of number, type, yield, and delivery means of enemy nuclear weapons and chemical and biological munitions or agents available to the enemy.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.3.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.3 Determine Enemy Tactics

<u>Description</u>: The user requires the capability to determine enemy tactics through analysis of published documents, INTSUMs, PERINTREPs, and current tactical situation.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.4.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.6.4 Determine Enemy Level of Training

<u>Description</u>: The user requires the capability to determine the enemy level of training through analysis of INTSUMs and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.5 Determine Enemy Technical Data

<u>Description</u>: The user requires the capability to determine the technical capabilities of enemy weapon systems through analysis of published documents, INTSUMs, and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.6.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.6.6 Determine Enemy Logistics Situation

<u>Description</u>: The user requires the capability to determine the enemy logistics situation through analysis of INTSUMs and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.7.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.7 Determine Enemy Combat Effectiveness

<u>Description</u>: The user requires the capability to determine enemy combat effectiveness through analysis of INTSUMs, PERINTREPs, enemy composition and disposition, personnel status, and logistics situation.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.8 Determine Enemy Personnel Status

<u>Description</u>: The user requires the capability to determine the enemy personnel status through analysis of enemy morale status and personnel on-hand, required, and lost.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.9.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.8.1 Determine Enemy Morale Status

<u>Description</u>: The user requires the capability to determine the enemy morale status through analysis of INTSUMs and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.9.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.8.2 Determine Enemy Personnel On-Hand

<u>Description</u>: The user requires the capability to determine enemy personnel on-hand through analysis of INTSUMs and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.9.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.8.3 Determine Enemy Personnel Requirements

<u>Description</u>: The user requires the capability to determine enemy personnel requirements through analysis of INTSUMs and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.9.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.8.4 Determine Enemy Personnel Losses

<u>Description</u>: The user requires the capability to determine enemy personnel losses through analysis of INTSUMs and PERINTREPs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.9.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.9 Display Enemy Order of Battle

<u>Description</u>: Users require the capability to display the enemy order of battle, in text and graphical formats, on available hardware and software.

Source Document: MCS UFD, Sections 2.4.6.1.2.3.1 & 3.2.1.1.5.4.6.10.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.10 Print Enemy Order of Battle

<u>Description</u>: Users require the capability to print he enemy order of battle using available hardware and software.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.11.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.6.11 Distribute Enemy Order of Battle

<u>Description</u>: The user requires the capability to distribute the enemy order of battle to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.5.4.6.12.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7 Develop Doctrinal Templates

<u>Description</u>: The user requires the capability to develop doctrinal templates through conversion of enemy order of battle data into graphic portrayals.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.7; FBCB2 UFD, Sections 3.4.3.7 & 3.4.3.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7.1 Receive Doctrinal Templates

Description: Users require the capability to receive doctrinal templates in a user-defined format.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.7.1; FBCB2 Sections, 3.4.3.7.2 & 3.4.3.8.2.

Satisfaction Source: G-2/S-2.

3.5.5.4.7.2 Modify Doctrinal Templates

<u>Description</u>: Users require the capability to amend doctrinal templates by modifying existing templates.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.7.2; FBCB2 UFD, Sections 3.4.3.7.3 & 3.4.3.8.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7.3 Store Doctrinal Templates

<u>Description</u>: Users require the capability to store doctrinal templates electronically for future retrieval, modification, and archival.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.4.7.3; FBCB2 UFD, Sections 3.4.3.7.4 & 3.4.3.8.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7.4 Display Doctrinal Templates

<u>Description</u>: Users require the capability to display doctrinal templates in a user-defined format.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.4.7.4; FBCB2 UFD, Sections 3.4.3.7.6 & 3.4.3.8.6.

3.5.5.4.7.5 Delete Doctrinal Templates

<u>Description</u>: Users require the capability to delete doctrinal templates from the data base.

Source Document: FBCB2 UFD, Sections 3.4.3.7.5 & 3.4.3.7.8.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7.6 Print Doctrinal Templates

Description: Users require the capability to print doctrinal templates using available hardware and

software.

Source Document: FBCB2 UFD, Sections 3.4.3.7.7 & 3.4.3.7.8.7.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7.7 Query Doctrinal Templates

<u>Description</u>: Users require the capability to query doctrinal templates.

Source Document: FBCB2 UFD, Sections 3.4.3.7.8 & 3.4.3.7.8.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.7.8 Distribute Doctrinal Templates

<u>Description</u>: Users require the capability to distribute doctrinal templates.

Source Document: FBCB2 UFD, Sections 3.4.3.7.5 & 3.4.3.7.8.5.

3.5.5.4.8 Develop Probable Attack Profile

<u>Description</u>: The user requires the capability to develop a profile of the probable attack through analysis of enemy courses of action (COAs) and application of doctrinal, event, and attack profile templates.

Source Document: MCS UFD, Section 3.2.1.1.5.4.8.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.8.1 Receive Attack Profile Templates

<u>Description</u>: Users require the capability to receive the attack profile template in a user-defined format.

Source Document: MCS UFD, Section 3.2.1.1.5.4.8.1.

Satisfaction Source: G-2/S-2.

3.5.5.4.8.2 Maintain Attack Profile Templates

<u>Description</u>: The user requires the capability to electronically store, retrieve, modify, update, and display attack profile templates.

Source Document: MCS UFD, Section 3.2.1.1.5.4.8.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.8.3 Display Attack Profile Templates

<u>Description</u>: Users require the capability to display attack profile templates in a user-defined format.

Source Document: MCS UFD, Section 3.2.1.1.5.4.8.3.

3.5.5.4.8.4 Modify Attack Profile Templates

<u>Description</u>: Users require the capability to amend attack profile templates by modifying existing templates.

Source Document: MCS UFD, Section 3.2.1.1.5.4.8.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9 Develop Threat Intentions

<u>Description</u>: The user requires the capability to determine probable threat intentions through analysis of threat COAs, future task organization, future threat composition, projections of most probable and most dangerous threat COAs, and impacts of enemy actions on friendly force operations.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.9; AGCCS SSS, Section 3.2.1.4.15.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.1 Develop Threat COAs

<u>Description</u>: The user requires the capability to determine COAs available to the threat through analysis of recent and present enemy activity, and determination of enemy knowledge of friendly situation and Intent.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.1.1 Analyze Recent Enemy Activity

<u>Description</u>: The user requires the capability to analyze recent enemy activity through review of INTSUMs, PERINTREPs, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.1.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.1.2 Analyze Present Enemy Activity

<u>Description</u>: The user requires the capability to analyze present enemy activity through review

of INTSUMs, PERINTREPs, recent enemy activity, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.1.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.1.3 Determine Enemy Knowledge of Own Intent

Description: Users require the capability to determine enemy knowledge of friendly forces intent

through analysis of INTSUMs, PERINTREPs, recent enemy activity, and historical precedence. Users need an

analytical capability to help them determine the extent to which the deception story and related actions have affected

the plans and actions of the opposing operational commander and his staff. The application will allow users to

predict the degree to which future deception success will influence the selection of a best COA from among several

competing ones.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.9.1.3; STACCS UFD, Section 3.2.2.4.1.6.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.1.4 Determine Enemy Knowledge of Own Situation

<u>Description</u>: The user requires the capability to determine enemy knowledge of friendly forces

situation through analysis of INTSUMs, PERINTREPs, recent enemy activity, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.1.4.

Satisfaction Source: Enemy Situation data base files.

3-47

3.5.5.4.9.1.5 Determine Primary Threat COA

<u>Description</u>: Users require the capability to determine the primary COA open to the threat through analysis of available enemy COAs. The user will have the capability of predicting the locations of enemy forces based upon their last known location, direction, and speed of travel. This prediction data will be displayed on the SITMAP, and will be available to other ABCS decision support tools for use in planning the deployment of friendly forces.

Source Documents: MCS UFD, Section 3.2.1.1.5.4.9.1.5; STACCS UFD, Section 3.2.2.4.1.7.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.1.6 Determine Alternative Threat COAs

<u>Description</u>: The user requires the capability to determine alternative threat COAs through analysis of recent and present enemy activity, and determination of enemy knowledge of friendly situation and intent.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.1.6.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.2 Project Future Threat Task Organization

<u>Description</u>: The user requires the capability to project future threat task organizations through analysis of INTSUMs, PERINTREPs, recent enemy activity, available COAs, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.2.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.9.3 Project Future Threat Composition

<u>Description</u>: The user requires the capability to project future threat composition through analysis of INTSUMs, PERINTREPs, recent enemy activity, available COAs, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.3.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.4.9.4 Project Most Probable Threat COA

<u>Description</u>: The user requires the capability to project the most probable threat COA through analysis of INTSUMs, PERINTREPs, recent enemy activity, available COAs, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.5 Project Most Dangerous Threat COA

<u>Description</u>: The user requires the capability to project the most dangerous threat COA through analysis of intelligence summaries ,(INTSUMs), PERINTREPs, recent enemy activity, available COAs, historical precedence, and friendly forces compositions and dispositions.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.6 Determine Friendly Tactical Decision Points (DPs)

<u>Description</u>: Users require the capability to determine tactical DPs through analysis of targeted areas of interest (TAIs), and availability and capability of friendly fire and maneuver systems.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.6.

Satisfaction Source: Enemy Situation data base and friendly unit data base files.

3.5.5.4.9.7 Determine Enemy Impacts on Force Operations

<u>Description</u>: Users require the capability to determine enemy impacts on friendly force operations through analysis of enemy COAs and friendly force intentions and COAs.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.7.

<u>Satisfaction Source</u>: Enemy Situation data base files and COA Development and Analysis common function (see Section 4).

3.5.5.4.9.8 Maintain Threat Evaluation Data Base

<u>Description</u>: The user requires the capability to electronically store, retrieve, modify, update, and display the threat evaluation data base.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.9 Prepare Threat COA Information/Impacts

<u>Description</u>: The user requires the capability to prepare information summaries and impact analyses of each threat COA.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.9.

Satisfaction Source: Enemy Situation data base files.

3.5.5.4.9.10 Distribute Threat COA Information/Impacts

<u>Description</u>: The user requires the capability to distribute information summaries and impact analyses of each threat COA to staff and subordinate elements involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.5.4.9.10.

Satisfaction Source: Enemy Situation data base files.

Conduct Threat Integration 3.5.5.5

Description: The user requires the capability to conduct threat integration through development

of situation and event templates, and preparation of the ENSIT overlay.

Source Document: MCS UFD, Section 3.2.1.1.5.5

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1 **Develop Situation Templates**

Description: The user requires the capability to develop situation templates addressing how the

effects of terrain, weather constraints, and confirmed intelligence may cause enemy forces to deviate from doctrinal

dispositions, frontages, depths, and echelon spacing. Doctrinal templates, combined obstacle and confirmed

intelligence overlays, and order of battle worksheets are the basis for situation templates.

Source Documents: MCS UFD, Section 3.2.1.1.5.5.1; FBCB2 UFD, Sections 3.4.3.7 & 3.4.3.8.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.5.1.1 Incorporate Weather Restrictions

Description: The user requires the capability to analyze the effects of weather restrictions on enemy

forces and how those constraints may cause them to deviate from doctrinal operations. These effects are incorporated

into the situation template.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.1.

Satisfaction Source: Weather Information common function (see Section 11).

3-51

3.5.5.5.1.2 Incorporate Terrain Restrictions

<u>Description</u>: The user requires the capability to analyze the effects of terrain restrictions on enemy forces and how those restrictions may cause them to deviate from doctrinal operations. These effects are incorporated into the situation template.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.2.

Satisfaction Source: Terrain Evaluation common function (see Section 6).

3.5.5.5.1.3 Incorporate Doctrinal Template

<u>Description</u>: The user requires the capability to incorporate the doctrinal template into the situation template, using it as a base upon which to develop analysis.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.3.

Satisfaction Source: Requirement 2.5.5.4.7, Develop Doctrinal Template.

3.5.5.5.1.4 Identify Critical Battlefield Areas

<u>Description</u>: The user requires the capability to use knowledge of enemy and friendly operations and terrain analysis to identify critical battlefield areas within the areas of interest and operations.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.4.

Satisfaction Source: Terrain Evaluation common function (Section 6) and on-line threat doctrine files (see Section 15).

3.5.5.5.1.5 Provide Target Development Support

<u>Description</u>: The user requires the capability to provide support to the G3/S and FSCOORD/FSE in the development of targeting of enemy forces.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.5.1 Support High-Payoff Target Identification

<u>Description</u>: The user requires the capability to provide support to the G-3/S-3 and FSCOORD/FSE in the identification of high-payoff targets.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.5.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.5.2 Support High-Value Target Identification

<u>Description</u>: The user requires the capability to provide support to the G-3/S-3 and FSCOORD/FSE in the identification of high-value targets.

Source Document: MCS UFD, Section 3.2.1.1.5.5.1.5.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.6 Prepare the Situation Template

<u>Description</u>: The user requires the capability to prepare the situation template using doctrinal symbology and formats.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.5.1.6; FBCB2 UFD, Sections 3.4.3.7.1 & 3.4.3.8.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.7 Maintain Temporary Situation Files

<u>Description</u>: The user requires the capability to electronically store, retrieve, modify, update, and display temporary situation Files.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.5.1.7; FBCB2 UFD, Sections 3.4.3.7.2, 3.4.3.7.3, 3.4.3.7.4, 3.4.3.8.2, 3.4.3.8.3 & 3.4.3.8.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.8 Display Situation Template

<u>Description</u>: Users require the capability to display the situation template in a user-defined format.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.5.1.8; FBCB2 UFD, Sections 3.4.3.7.6 & 3.4.3.8.6.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.9 Distribute Situation Template

<u>Description</u>: Users require the capability to distribute the situation template to staff and subordinate elements involved in the development of the plan.

Source Documents: MCS UFD, Section 3.2.1.1.5.5.1.9; FBCB2 UFD, Sections 3.4.3.7.9 & 3.4.3.8.9.

Satisfaction Source: Enemy Situation data base files.

3.5.5.1.10 Delete Situation Template

Description: Users require the capability to delete the situation template from the data base.

Source Document: FBCB2 UFD, Sections 3.4.3.7.5 & 3.4.3.8.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.11 Print Situation Template

<u>Description</u>: Users require the capability to print the situation template using available hardware and software.

Source Document: FBCB2 UFD, Sections 3.4.3.7.7 & 3.4.3.8.7.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.1.12 Query Situation Template

<u>Description</u>: Users require the capability to query the situation template.

Source Document: FBCB2 UFD, Sections 3.4.3.7.8 & 3.4.3.8.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2 Develop Event Templates

<u>Description</u>: The user requires the capability to develop event templates depicting locations where critical events and activities are expected to occur and where high-value targets (HVTs) will appear.

Source Documents: MCS UFD, Section 3.2.1.1.5.5.2; FBCB2 UFD, Sections 3.4.3.7 & 3.4.3.8.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.5.2.1 Determine Named Areas of Interest (NAIs)

<u>Description</u>: The user requires the capability to determine locations for NAIs where enemy activity or lack of activity will confirm or deny a particular enemy COA.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.1.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.5.2.2 Develop NAI Information

<u>Description</u>: The user requires the capability to develop information pertaining to activities in NAIs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.3 Determine TAIs

<u>Description</u>: The user requires the capability to determine locations for TAIs where application of friendly fire and maneuver can successfully interdict enemy COAs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.3.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.5.2.4 Develop TAI Information

<u>Description</u>: The user requires the capability to develop information pertaining to activities in TAIs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.5 Provide Intelligence Collection Plan Support

<u>Description</u>: The user requires the capability to provide support to the development of the intelligence collection plan, addressing locations of NAIs, TAIs, and DPs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.6 Provide Force Reconnaissance/Surveillance (R/S) Plan Support

<u>Description</u>: The user requires the capability to provide support to the development of the force reconnaissance/surveillance plan, addressing observation of NAIs, TAIs, and DPs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.6.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.7 Identify Areas to Confirm/Deny COAs

<u>Description</u>: The user requires the capability to identify areas in which activity or inactivity will confirm or deny enemy COAs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.7.

Satisfaction Source: Enemy Situation data base and on-line threat doctrine files (see Section 15).

3.5.5.5.2.8 Develop Events Analysis Matrix

<u>Description</u>: The user requires the capability to develop the events analysis matrix to support determination of enemy COAs.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.9 Identify Opportunity for Exploitation

<u>Description</u>: The user requires the capability to identify opportunities for exploitation of battlefield situation through analysis of friendly and enemy dispositions.

Source Document: MCS UFD, Section 3.2.1.1.5.5.2.9.

Satisfaction Source: Enemy Situation data base and Friendly Unit data base.

3.5.5.5.2.10 Prepare Event Template

<u>Description</u>: The user requires the capability to prepare the event template using doctrinal symbology and formats.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.5.2.10; FBCB2 UFD, Sections 3.4.3.7.1 & 3.4.3.8.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.11 Maintain Event Template Files

<u>Description</u>: The user requires the capability to electronically store, retrieve, modify, update, and display event template files.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.5.2.11; FBCB2 UFD, Sections 3.4.3.7.2, 3.4.3.7.3, 3.4.3.7.4, 3.4.3.8.2, 3.4.3.8.3 & 3.4.3.8.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.2.12 Display Event Template

<u>Description</u>: Users require the capability to display the event template in a user-defined format.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.5.5.2.12; FBCB2 UFD, Sections 3.4.3.7.6 & 3.4.3.8.6.

Satisfaction Source: Enemy Situation data base files.

3.5.5.2.13 Distribute Event Template

<u>Description</u>: Users require the capability to distribute the event template to staff and subordinate elements, plus any others involved in the development of the plan.

Source Documents: MCS UFD, Section 3.2.1.1.5.5.2.13; FBCB2 UFD, Sections 3.4.3.7.9 &

3.4.3.8.9.

Satisfaction Source: Enemy Situation data base files.

3.5.5.2.14 Delete Event Template

Description: Users require the capability to delete the event template from the data base.

Source Document: FBCB2 UFD, Sections 3.4.3.7.5 & 3.4.3.8.5.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.2.15 Print Event Template

<u>Description</u>: Users require the capability to print the event template using available hardware and software.

Source Document: FBCB2 UFD, Sections 3.4.3.7.7 & 3.4.3.8.7.

Satisfaction Source: Enemy Situation data base files.

3.5.5.2.16 Query Event Template

<u>Description</u>: Users require the capability to query the event template.

Source Document: FBCB2 UFD, Sections 3.4.3.7.8 & 3.4.3.8.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.3 Prepare ENSIT for Plans/Orders

<u>Description</u>: The user requires the capability to prepare the enemy situation information and overlays using doctrinal symbology and formats.

Source Document: MCS UFD, Section 3.2.1.1.5.5.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.3.1 Prepare ENSIT

<u>Description</u>: The user requires the capability to prepare the ENSIT using doctrinal symbology and formats.

Source Document: MCS UFD, Section 3.2.1.1.5.5.3.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.3.2 Distribute ENSIT

<u>Description</u>: Users require the capability to distribute the ENSIT to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.5.5.3.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.3.3 Update the ENSIT

<u>Description</u>: Users require the capability to amend the ENSIT through updating existing information.

Source Document: MCS UFD, Section 3.2.1.1.5.5.3.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.5.4 Provide Threat Information to Decision Support Template (DST) / Decision Support Matrix (DSM).

<u>Description</u>: The user requires the capability to complete the threat integration process by providing threat information to the DST and DSM, and by distributing this information to staff and subordinate elements involved in the development of the plan.

Source Documents: MCS UFD, Section 3.2.1.1.5.5.4; FBCB2 Sections 3.4.3.7 & 3.4.3.8.

Satisfaction Source: Enemy Situation data base files.

3.5.5.6 Collate/Distribute IPB Products

<u>Description</u>: Users require an automated capability to disseminate the full range of developed intelligence products. Users will be able to transmit completed intelligence products to be included as annexes to OPLANs and OPORDs, briefings, estimates, messages, reports, situation overlays, and summaries. IPB products are collated and distributed in the forms of initial IPB products (electronic and printed), updates to those products, and printed copies of those products.

Source Documents: MCS UFD, Section 3.2.1.1.5.6; STACCS UFD, Section 3.2.2.14.4.

Satisfaction Source: Enemy Situation data base files.

3.5.5.6.1 Distribute Initial IPB Products

<u>Description</u>: Users require the capability to distribute initial IPB products to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.5.6.1.

Satisfaction Source: Enemy Situation data base files.

3.5.5.6.2 Distribute IPB Updates

<u>Description</u>: Users require the capability to distribute IPB updates to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.5.6.2.

Satisfaction Source: Enemy Situation data base files.

3.5.5.6.3 Print IPB Products

<u>Description</u>: Users require the capability to print IPB products in doctrinally correct formats using available hardware and software.

Source Document: MCS UFD, Section 3.2.1.1.5.6.3.

Satisfaction Source: Enemy Situation data base files.

3.5.5.7 Provide On-Line Threat Doctrine

<u>Description</u>: Users require the capability to access on-line threat doctrine.

Source Document: MCS UFD, Section 3.2.1.1.5.7.

Satisfaction Source: See Standard Reference files common function (see Section 15).

3.5.6 Incident Reporting

Description: Users require a capability to monitor significant events occurring in the force area of operations. Significant events include terrorists activities, neutral countries, weather, and rear battle and deception operations. Users will be able to prepare, transmit, and retrieve spot reports of incidents, and to transmit these reports to other users in the network. Users will be able to retrieve data about the environment, about activities of radicals and insurgents, and about the interaction of soldiers with host nation civilians. This function will also provide a capability for staff users to monitor the support of rear area operations and deception operations in the communications zone (COMMZ). The incident reporting application will interoperate with joint and strategic level automated command and control systems. (This requirement may be a part of an IEW function).

Source Documents: STACCS UFD, Section 3.2.1.11; AGCCS SSS, Section 3.2.1.4.15.1.

Satisfaction Source: Subordinate units.

3.5.6.1 Monitor Radical and Insurgent Data

<u>Description</u>: Users require a capability to monitor and evaluate data on terrorists, their backgrounds, and their activities. Data include information on current and expected terrorist operations and attacks, countermeasures, and investigations that are ongoing, both by the U.S. and other countries.

Source Documents: STACCS UFD, Section 3.2.1.11.2; AGCCS SSS, Section 3.2.1.4.15.1.

Satisfaction Source: Subordinate units.

3.5.6.2 Monitor Neutral Situation Data

<u>Description</u>: Users require a capability to monitor and evaluate data on neutral countries, to include area of operations data, military situation data, activities and intentions of populations, military forces and their capabilities, national resources, and the political situation.

Source Documents: STACCS UFD, Section 3.2.1.11.3; AGCCS SSS, Section 3.2.1.4.1.15.1.

Satisfaction Source: Subordinate units.

3.5.6.3 Monitor Environmental Data

<u>Description</u>: Users require a capability to monitor and evaluate environmental data that includes weather, climate, topography, and hydrography on all areas of interest to the command. The data includes current information on surface and atmospheric weather, forecasts, and space environmental conditions.

Source Documents: STACCS UFD, Section 3.2.1.11.4; AGCCS SSS, Section 3.2.1.4.15.1.

Satisfaction Source: Subordinate units.

3.5.6.4 Monitor and Report on Interactions Between Soldiers and Host Nation Nationals

<u>Description</u>: Users require a capability to monitor and evaluate information pertaining to positive and negative interactions between U.S. soldiers and host nation nationals. Users need text and graphics tools, to

include text scanning capabilities, to enable analysts to assemble and transmit meaningful evaluations and reports

on negative and positive incidents.

Source Document: STACCS UFD, Section 3.2.1.11.5.

Satisfaction Source: Subordinate units.

3.5.6.5

Add Spot Report Data

Description: Users require the capability to add new spot report (size, activity, unit, time, and

equipment) records to the intelligence data base. The user will have the capability to add any one or all of the

following fields of data to the spot report: (1) report type, (2) event DTG, (3) report DTG, (4) event grid

coordinates, (5) unit identification code (UIC), (6) unit name, (7) incident type, (8) probable target, (9) perpetrator,

(10) event place, and (11) optional narrative text.

Source Documents: STACCS UFD, Section 3.2.1.11.1; AGCCS SSS, Section 3.2.1.4.15.1;

FBCB2 UFD, Sections 3.4.4.7 & 3.4.4.8.

Satisfaction Source: Subordinate units.

3.5.6.5.1 Query Spot Report Data

Description: Users require the capability to query the data base and to retrieve incident data by

entering information in one or several fields in a blank spot report form on the screen. The fields of data in the spot

report include: (1) report type, (2) event DTG, (3) report DTG, (4) event UTM, (5) unit identification code (UIC),

(6) unit name, (7) incident type, (8) probable target, (9) perpetrator, and (10) event place.

Source Documents: STACCS UFD, Section 3.2.1.11.1.1; FBCB2 UFD, Sections 3.4.4.7.8 &

3.4.4.8.8.

Satisfaction Source: Subordinate units.

3-64

3.5.6.5.2 Update Spot Report Data

<u>Description</u>: Users require the capability to update existing spot report incident records in the data base. The user will have the capability to edit any one or all of the following fields of data in the spot report: (1) report type, (2) event DTG, (3) report DTG, (4) event UTM, (5) unit identification code (UIC), (6) unit name, (7) incident type, (8) probable target, (9) perpetrator, (10) event place, and (11) optional narrative text.

Source Documents: STACCS UFD, Section 3.2.1.11.1.2; FBCB2 UFD, Sections 3.4.4.7.3 & 3.4.4.8.3.

Satisfaction Source: Subordinate units.

3.5.6.5.3 Create Selected Spot Reports

<u>Description</u>: Users require the capability to create selected spot reports. The five kinds of reports that the user will be able to generate are: (1) report of incident type, (2) event starting and ending DTG report, (3) report starting and ending DTG report, (4) UIC report, and (5) a report that includes the information in all the other reports. The user will be able to save the reports to a file, print them, and transfer them to other users as desired.

Source Documents: STACCS UFD, Section 3.2.1.11.1.3; FBCB2 UFD, Sections 3.4.4.7.1 & 3.4.4.8.1.

Satisfaction Source: Subordinate units.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 4

COURSE OF ACTION DEVELOPMENT AND ANALYSIS FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the course of action (COA) development and analysis common user requirements.

4.1 FUNCTION NAME

Course of Action Development and Analysis

4.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to develop and analyze COAs.

4.3 FUNCTION DESCRIPTION

The Course of Action Development and Analysis function supports commanders and staffs (combat, combat support, and combat service support) in developing and analyzing COAs. Using this function, commanders and staffs will be able to generate and analyze COAs and, then, eliminate all but one of them. It will allow users to retain on file multiple COAs. Users will also be able to review and analyze existing planning studies. It will facilitate battle command by automating COA development and analysis throughout the force projection cycle. Its products will enhance the planning of operations.

This function includes the capability to:

- Receive orders from higher headquarters and extract planning information from them.
- Manage planning facts and assumptions.
- Analyze the mission including:

- Determining restrictions and constraints.
- Identifying specified, implied, and essential tasks.
- Conducting time analysis.
- Issuing the restated mission.
- Issuing the commander's planning guidance.
- Issuing a warning order.
- Develop staff estimates.
- Develop COAs, including COA statements and sketches.
- Review operation plans (OPLANs) and contingency plans (CONPLANs) for COAs.
- Analyze and compare COAs through war gaming and battlefield operating system (BOS)
 assessment.
- Conduct risk analysis and assessment.
- Select a COA.
- Develop decision support templates.
- Develop decision support/synchronization matrices.
- Provide on-line force doctrine.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute COA development and analysis information and products.

4.4 REFERENCES

The following documents provided the user requirements for this function:

- FM 101-5, Command and Control for Commanders and Staffs.
- CGSC ST 100-9, The Tactical Decision Making Process.
- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Section 3.2.1.4.5.
- Maneuver Control System (MCS) User Functional Description (UFD), Section 3.2.1.1.
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.2.4.
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.6.

4.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figures 4-1 through 4-20 depict the hierarchy of the user functional requirements.

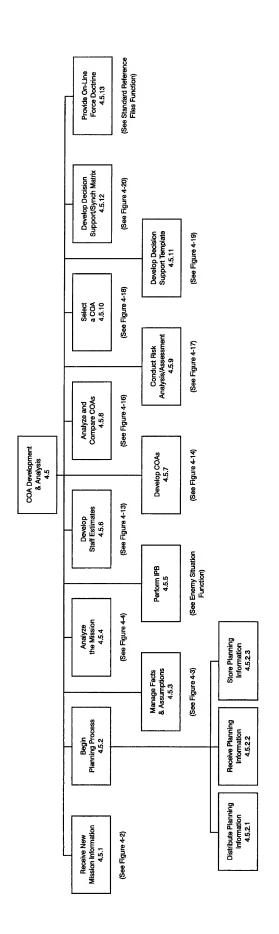


Fig 4-1 COA Development and Analysis Decomposition

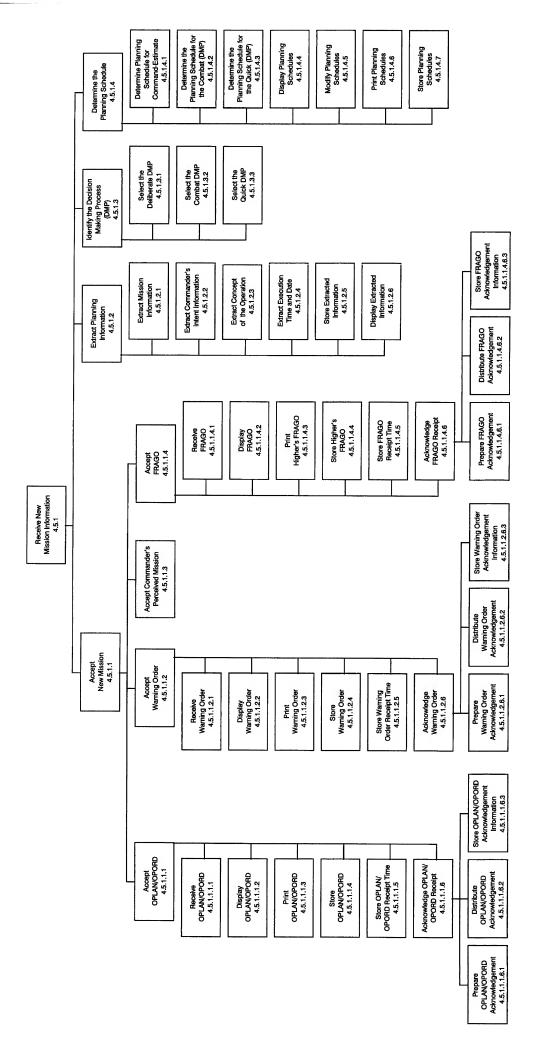


Fig 4-2 Receive New Mission Information Decomposition

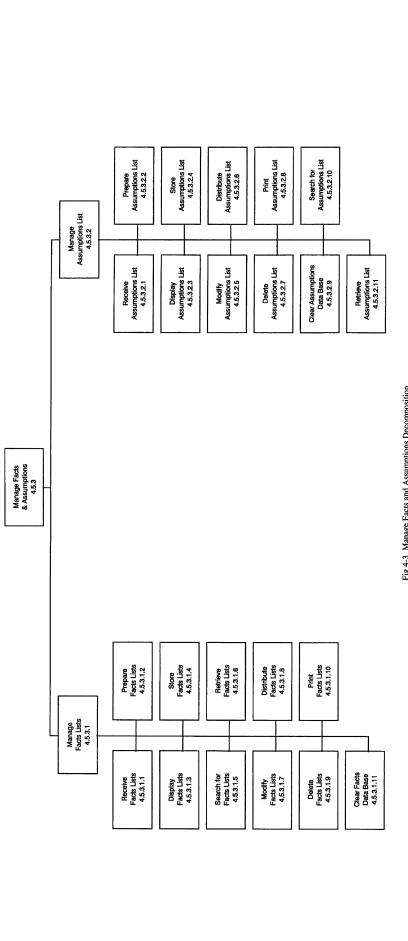


Fig 4-3 Manage Facts and Assumptions Decomposition

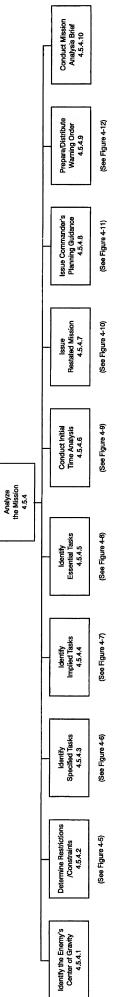


Fig 4-4 Analyze the Mission Decomposition

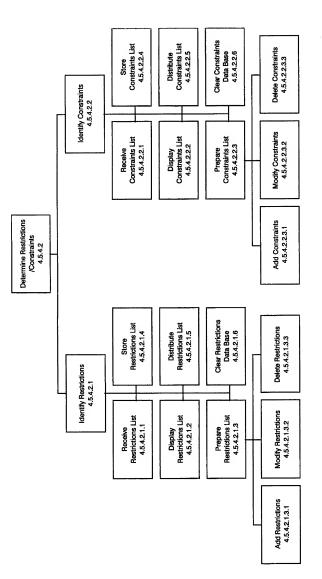


Fig 4-5 Determine Restrictions/Constraints Decomposition

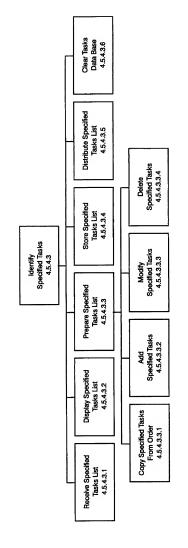


Fig 4-6 Identify Specified Tasks Decomposition

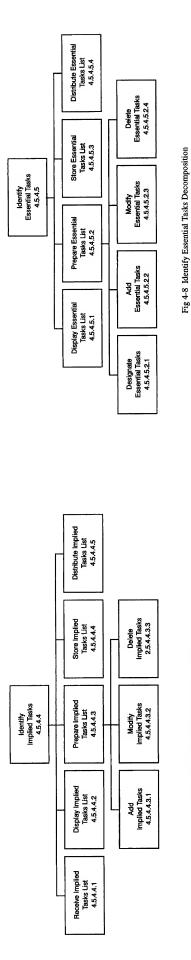


Fig 4-7 Identify Implied Tasks Decomposition

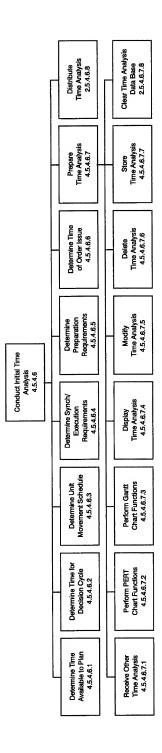


Fig 4-9 Conduct Initial Time Analysis Decomposition

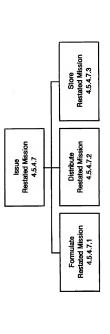


Fig 4-10 Issue Restated Mission Decomposition

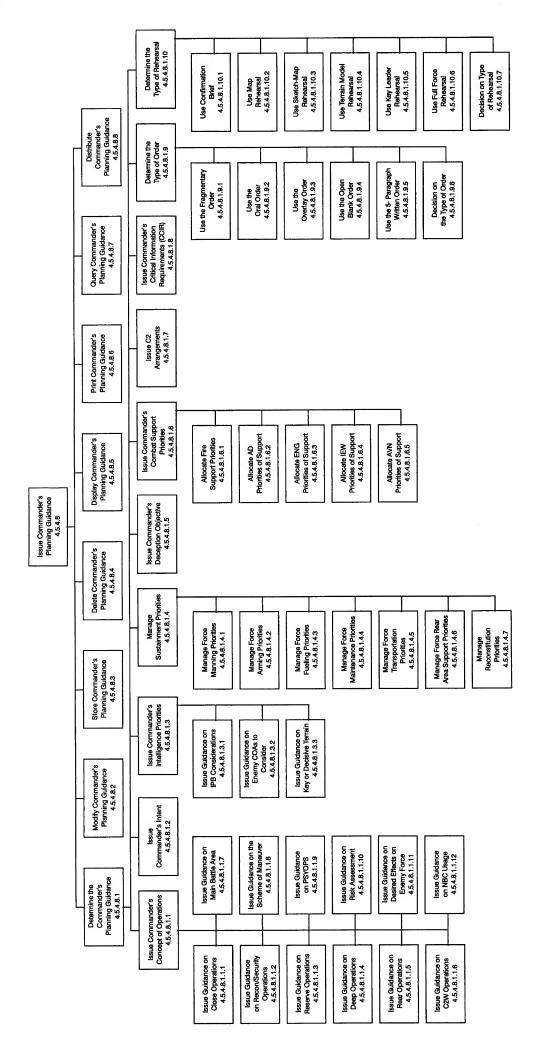


Fig 4-11 Issue Commander's Planning Guidance Decomposition

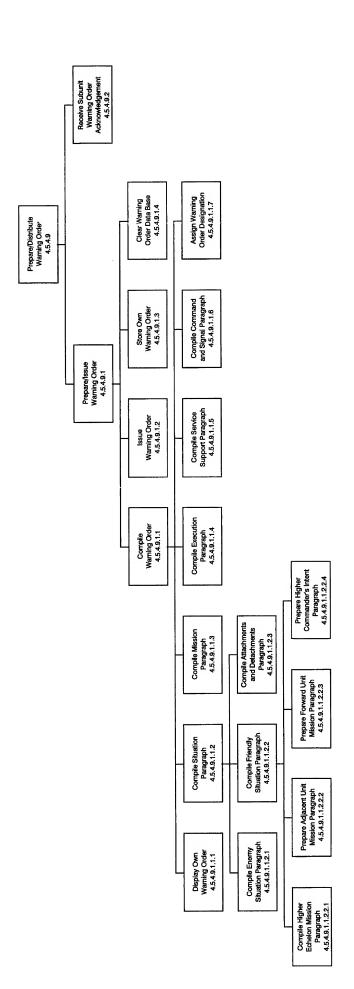
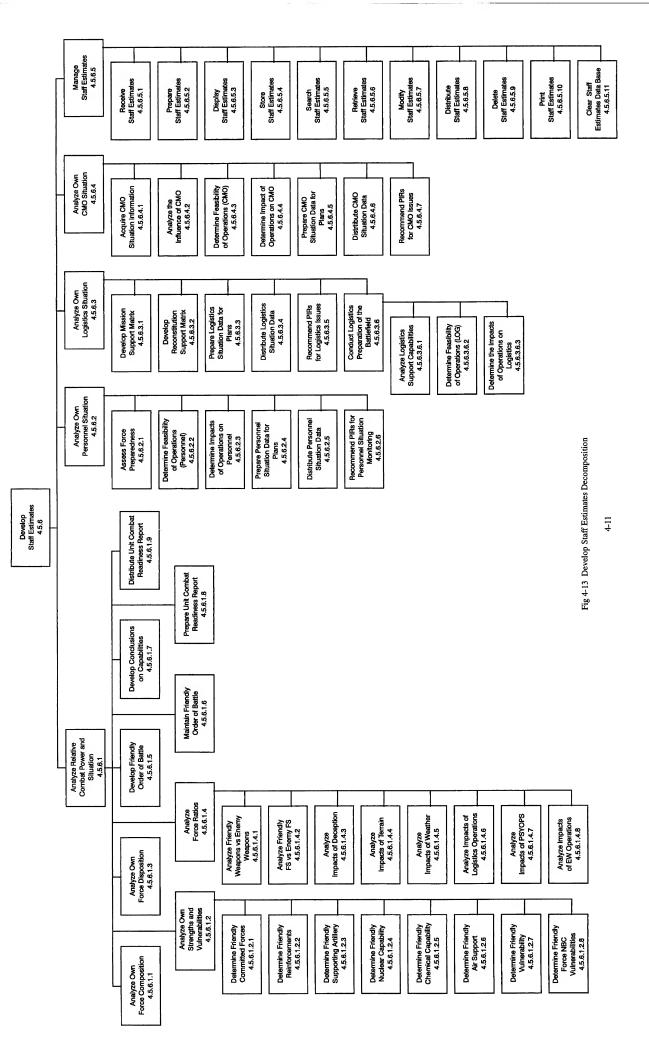


Fig 4-12 Prepare/Distribute Warning Order Decomposition



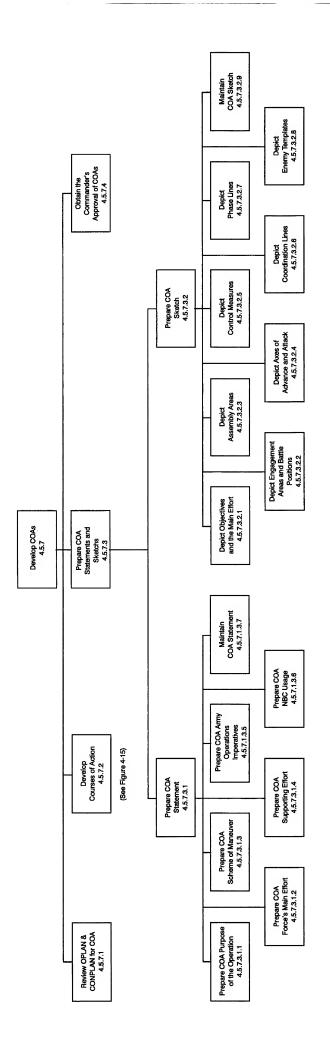


Fig 4-14 Develop COAs Decomposition

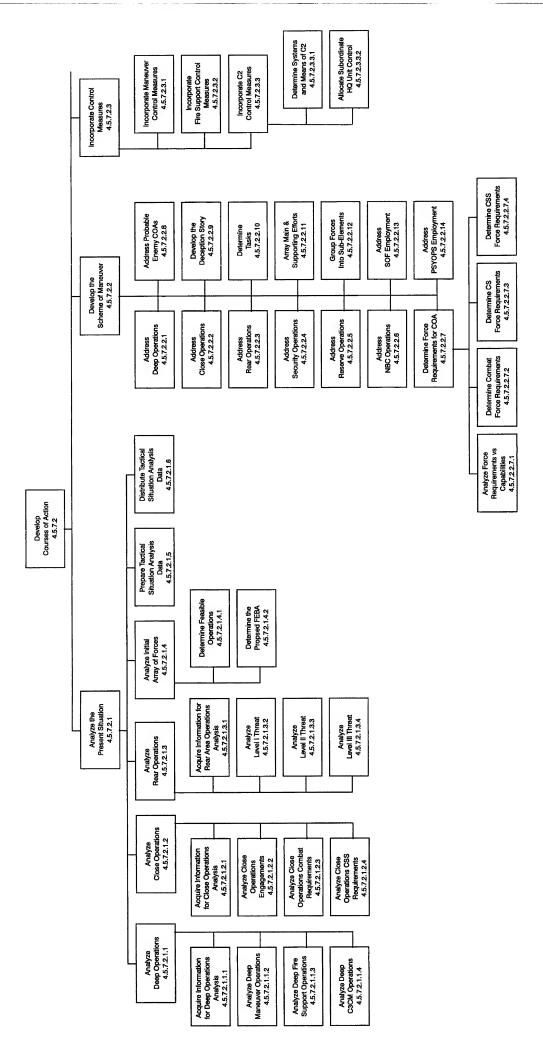


Fig 4-15 Develop a Course of Action Decomposition

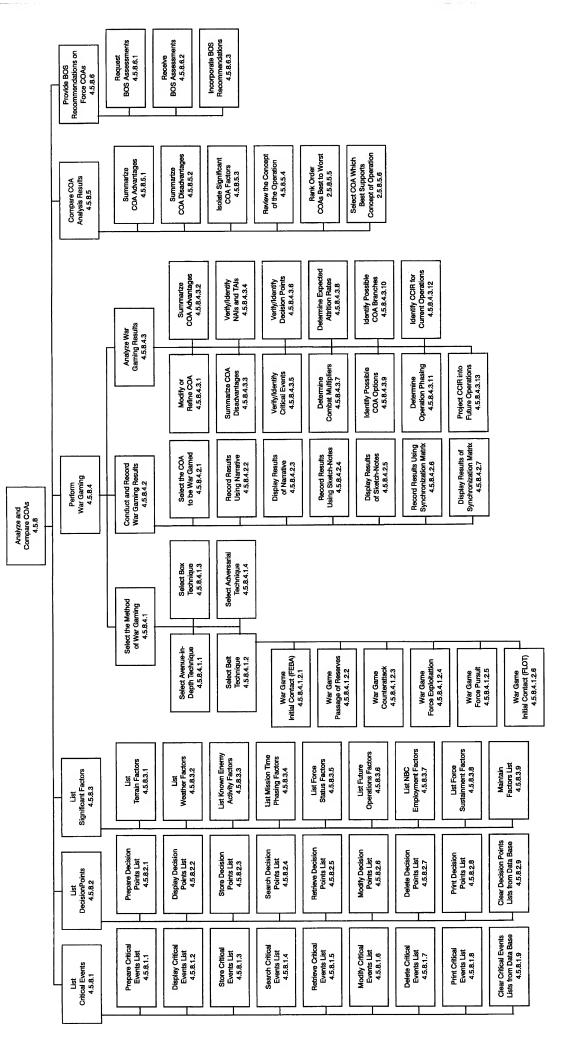


Fig 4-16 Analyze and Compare COAs Decomposition

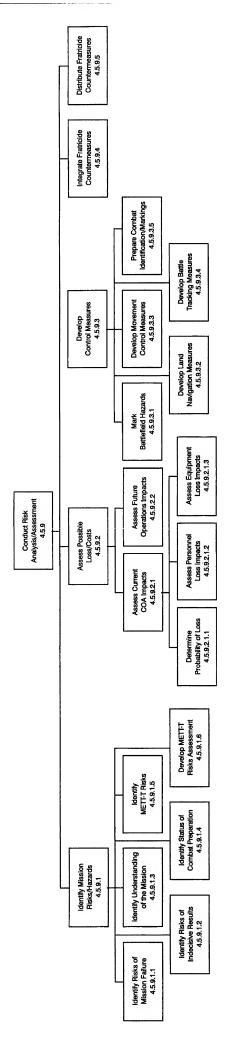


Fig 4-17 Conduct Risk Analysis/Assessment Decomposition

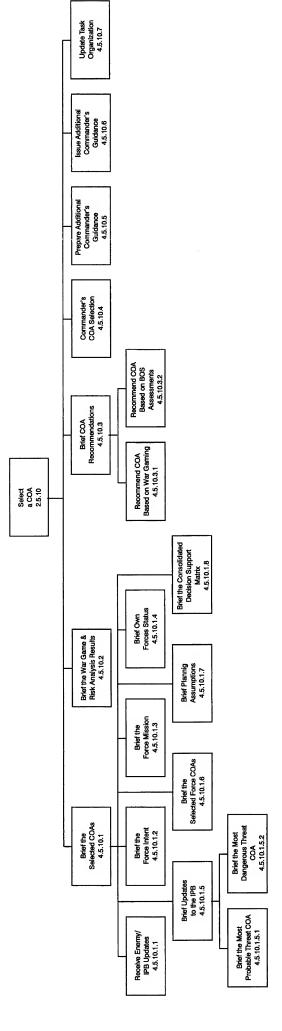


Fig 4-18 Select a COA Decomposition

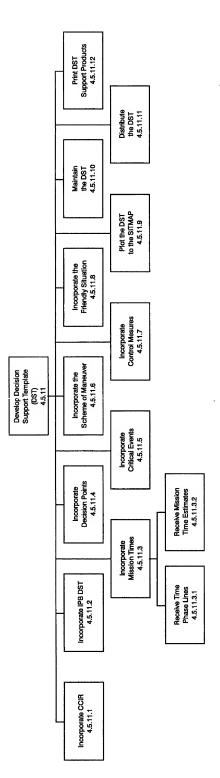


Fig 4-19 Develop Decision Support Template Decomposition

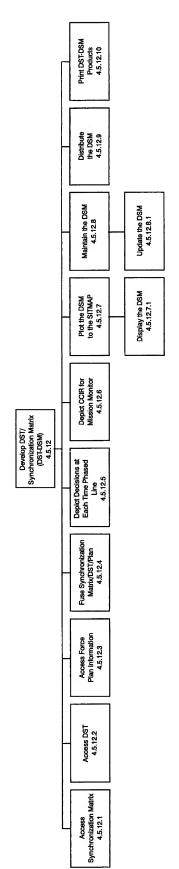


Fig 4-20 Develop Decision Support/Synch Matrix Decomposition

4.5.1 Receive New Mission Information

<u>Description</u>: Users require the capability to receive new mission information through acceptance of a new mission, extraction of planning information, determination of a planning schedule, and identification of the estimate process type to be used.

Source Documents: MCS UFD, Section 3.2.1.1.1; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Higher headquarters.

4.5.1.1 Accept New Mission

<u>Description</u>: Users require the capability to accept a new OPLAN/operation order (OPORD), a warning order, fragmentary order (FRAGO), or a perceived mission from the commander.

Source Document: MCS UFD, Section 3.2.1.1.1.

Satisfaction Source: Higher headquarters.

4.5.1.1.1 Accept OPLAN/OPORD

<u>Description</u>: Users will be able to receive, display, acknowledge receipt of, store, and print OPLANs/OPORDs.

Source Document: MCS UFD, Section 3.2.1.1.1.1.

Satisfaction Source: Higher headquarters.

4.5.1.1.1.1 Receive OPLAN/OPORD

<u>Description</u>: The OPLAN/OPORD recipient designated by the originator (sender) requires the capability to receive the complete OPLAN/OPORD in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.1.1.1.

Satisfaction Source: Higher headquarters.

4.5.1.1.1.2 Display OPLAN/OPORD

Description: Users require the capability to display the OPLAN/OPORD in a doctrinally correct

format.

Source Document: MCS UFD, Section 3.2.1.1.1.1.2.

Satisfaction Source: Orders data base files.

4.5.1.1.1.3 Print OPLAN/OPORD

<u>Description</u>: Users require the capability to print the OPLAN/OPORD using available hardware and software.

Source Document: MCS UFD, Section 3.2.1.1.1.1.4.

Satisfaction Source: Orders data base files.

4.5.1.1.1.4 Store OPLAN/OPORD

<u>Description</u>: Users require the capability to store the OPLAN/OPORD electronically for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.1.1.5.

Satisfaction Source: Higher headquarters.

4.5.1.1.1.5 Store OPLAN/OPORD Receipt Time

<u>Description</u>: Users require the capability to store the OPLAN/OPORD time of receipt with the OPLAN/OPORD and link the receipt time, such that it is immediately available upon access of the OPLAN/OPORD.

Source Document: MCS UFD, Section 3.2.1.1.1.1.6.

Satisfaction Source: System message handling capability.

4.5.1.1.1.6 Acknowledge OPLAN/OPORD Receipt

<u>Description</u>: Users require the capability to acknowledge OPLAN/OPORD receipt to the originator (sender).

Source Document: MCS UFD, Section 3.2.1.1.1.1.3.

Satisfaction Source: User-defined.

4.5.1.1.1.6.1 Prepare OPLAN/OPORD Acknowledgment

<u>Description</u>: Users require the capability to prepare a message to the originator of the OPLAN/OPORD acknowledging receipt of the order, by whom, when. The message uniquely identifies the OPLAN/OPORD being acknowledged.

Source Document: MCS UFD, Section 3.2.1.1.1.1.3.1.

Satisfaction Source: User-defined.

4.5.1.1.1.6.2 Distribute OPLAN/OPORD Acknowledgment

<u>Description</u>: Users require the capability to send the acknowledgment message to the OPLAN/OPORD originator.

Source Document: MCS UFD, Section 3.2.1.1.1.1.3.2.

Satisfaction Source: User-defined.

4.5.1.1.1.6.3 Store OPLAN/OPORD Acknowledgment Information

<u>Description</u>: The OPLAN/OPORD originator requires the capability to store the acknowledgment message(s) from the recipient(s).

Source Document: MCS UFD, Section 3.2.1.1.1.1.3.3.

Satisfaction Source: Higher headquarters.

4.5.1.1.2 Accept Warning Order

<u>Description</u>: Users require the capability to accept the warning order from the originator (sender).

Source Document: MCS UFD, Section 3.2.1.1.1.2

Satisfaction Source: Higher headquarters.

4.5.1.1.2.1 Receive Warning Order

<u>Description</u>: The warning order recipient designated by the originator (sender) requires the capability to receive the complete warning order in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.1.2.1.

Satisfaction Source: Higher headquarters.

4.5.1.1.2.2 Display Warning Order

<u>Description</u>: Users require the capability to display the warning order in a doctrinally correct format.

Source Document: MCS UFD, Section 3.2.1.1.1.1.2.2.

Satisfaction Source: Orders data base files.

4.5.1.1.2.3 Print Warning Order

<u>Description</u>: Users require the capability to print the warning order using available hardware and software available.

Source Document: MCS UFD, Section 3.2.1.1.1.2.4.

Satisfaction Source: Orders data base files.

4.5.1.1.2.4 Store Warning Order

<u>Description</u>: Users require the capability to store the warning order electronically for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.1.2.5.

Satisfaction Source: Higher headquarters.

4.5.1.1.2.5 Store Warning Order Receipt Time

<u>Description</u>: Users require the capability to store the warning order time of receipt with the warning order and link it to the warning order such that it is immediately available upon access of the warning order.

Source Document: MCS UFD, Section 3.2.1.1.1.2.6.

Satisfaction Source: System message handling capability.

4.5.1.1.2.6 Acknowledge Warning Order

<u>Description</u>: The recipient requires the capability to acknowledge warning order receipt to the originator (sender).

Source Document: MCS UFD, Section 3.2.1.1.1.2.3.

Satisfaction Source: User-defined.

4.5.1.1.2.6.1 Prepare Warning Order Acknowledgment

<u>Description</u>: Users require the capability to prepare a message to the originator of the warning order acknowledging receipt of the order, by whom, and when. The message uniquely identifies the warning order being acknowledged.

Source Document: MCS UFD, Section 3.2.1.1.1.2.3.1.

Satisfaction Source: User-defined.

4.5.1.1.2.6.2 Distribute Warning Order Acknowledgment

<u>Description</u>: Users require the capability to send the acknowledgment message to the warning order originator.

Source Document: MCS UFD, Section 3.2.1.1.1.2.3.2.

Satisfaction Source: User-defined.

4.5.1.1.2.6.3 Store Warning Order Acknowledgment Information

<u>Description</u>: The warning order originator requires the capability to store the acknowledgment message(s) from the recipient(s).

Source Document: MCS UFD, Section 3.2.1.1.1.2.3.3.

Satisfaction Source: Higher headquarters.

4.5.1.1.3 Accept Commander's Perceived Mission

<u>Description</u>: Users require the capability to accept the mission as perceived by the commander.

Source Document: MCS UFD, Section 3.2.1.1.1.1.3.

Satisfaction Source: Commander.

4.5.1.1.4 Accept FRAGO

Description: The user will be able to receive, display, acknowledge receipt of, store, and print

FRAGOs.

Source Document: MCS UFD, Section 3.2.1.1.1.4.

Satisfaction Source: Higher headquarters.

4.5.1.1.4.1 Receive FRAGO

<u>Description</u>: Users require the capability to receive the complete FRAGO in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.1.4.1.

Satisfaction Source: Higher headquarters.

4.5.1.1.4.2 Display FRAGO

<u>Description</u>: Users require the capability to display the FRAGO in a doctrinally correct format.

Source Document: MCS UFD, Section 3.2.1.1.1.4.2.

Satisfaction Source: Orders data base files.

4.5.1.1.4.3 Print Higher's FRAGO

<u>Description</u>: Users require the capability to print the FRAGO using available hardware and software.

Source Document: MCS UFD, Section 3.2.1.1.1.4.4.

Satisfaction Source: Orders data base files.

4.5.1.1.4.4 Store Higher's FRAGO

<u>Description</u>: Users require the capability to store the FRAGO electronically for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.1.4.5.

Satisfaction Source: Higher headquarters.

4.5.1.1.4.5 Store FRAGO Receipt Time

<u>Description</u>: Users require the capability to store the FRAGO time of receipt and link to it to the FRAGO such that it is immediately available upon access of the FRAGO.

Source Document: MCS UFD, Section 3.2.1.1.1.4.6.

Satisfaction Source: System message handling capability.

4.5.1.1.4.6 Acknowledge FRAGO Receipt

<u>Description</u>: Users require the capability to acknowledge FRAGO receipt to the originator (sender).

Source Document: MCS UFD, Section 3.2.1.1.1.4.3.

Satisfaction Source: User-defined.

4.5.1.1.4.6.1 Prepare FRAGO Acknowledgement

<u>Description</u>: Users require the capability to prepare a message to the originator of the FRAGO acknowledging receipt of the order, by whom, and when. The message uniquely identifies the FRAGO being acknowledged.

Source Document: MCS UFD, Section 3.2.1.1.1.4.3.1.

Satisfaction Source: User-defined.

4.5.1.1.4.6.2 Distribute FRAGO Acknowledgement

<u>Description</u>: Users require the capability to send the acknowledgment message to the FRAGO originator.

Source Document: MCS UFD, Section 3.2.1.1.1.4.3.2.

Satisfaction Source: User-defined.

4.5.1.1.4.6.3 Store FRAGO Acknowledgement Information

<u>Description</u>: The FRAGO originator requires the capability to store the acknowledgment message(s) from the recipient(s).

Source Document: MCS UFD, Section 3.2.1.1.1.4.3.3.

Satisfaction Source: Higher headquarters.

4.5.1.2 Extract Planning Information

<u>Description</u>: Users require the capability to extract planning information from the higher-echelon order.

Source Document: MCS UFD, Section 3.2.1.1.1.2.

Satisfaction Source: Higher headquarters' order.

4.5.1.2.1 Extract Mission Information

<u>Description</u>: Users require the capability to extract the mission of the higher-echelon unit from the order's mission paragraph.

Source Document: MCS UFD, Section 3.2.1.1.1.2.1.

Satisfaction Source: Higher headquarters' order.

4.5.1.2.2 Extract Commander's Intent Information

<u>Description</u>: Users require the capability to extract the intent of the higher-echelon commander from the order's commander's intent paragraph.

Source Document: MCS UFD, Section 3.2.1.1.1.2.2.

Satisfaction Source: Higher headquarters' order.

4.5.1.2.3 Extract Concept of the Operation

<u>Description</u>: Users require the capability to extract the higher-echelon commander's concept of the operation, sub-unit tasks, coordinating instructions, risk assessment, area of operation (AO), deception objective, and assets from the order's concept of operation paragraph.

Source Document: MCS UFD, Section 3.2.1.1.1.2.3.

Satisfaction Source: Higher headquarters' order.

4.5.1.2.4 Extract Execution Time and Date

<u>Description</u>: Users require the capability to extract the time and date of execution of the higher-echelon order from the order's header information, from the mission paragraph, and from the execution paragraph.

Source Document: MCS UFD, Section 3.2.1.1.1.2.4.

Satisfaction Source: Higher headquarters' order.

4.5.1.2.5 Store Extracted Information

<u>Description</u>: Users require the capability to store all the extracted information electronically for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.1.2.5.

Satisfaction Source: Higher headquarters' order.

4.5.1.2.6 Display Extracted Information

<u>Description</u>: Users require the capability to display extracted information for review and/or manipulation.

Source Document: MCS UFD, Section 3.2.1.1.1.2.6.

Satisfaction Source: Orders data base files.

4.5.1.3 Identify the Decision-Making Process (DMP)

<u>Description</u>: Users require the capability to select the appropriate decision-making process, given the mission and time available

Source Document: MCS UFD, Section 3.2.1.1.1.4.

Satisfaction Source: Commander.

4.5.1.3.1 Select the Deliberate Decision-Making Process

<u>Description</u>: Users require the capability to select the deliberate decision-making process, given the mission and sufficient time to complete the process.

Source Document: MCS UFD, Section 3.2.1.1.1.4.1.

Satisfaction Source: Commander.

4.5.1.3.2 Select the Combat Decision-Making Process

<u>Description</u>: Users require the capability to select the combat decision-making process, given the mission and sufficient time to complete the process. The combat decision-making process is selected when time constraints or the commander's guidance prevent development of the full command-estimate.

Source Document: MCS UFD, Section 3.2.1.1.1.4.2.

Satisfaction Source: Commander.

Select the Quick Decision-Making Process 4.5.1.3.3

Description: Users require the capability to select the quick decision-making process when time

is limited to execute the mission.

Source Document: MCS UFD, Section 3.2.1.1.1.4.3.

Satisfaction Source: Commander.

Determine the Planning Schedule 4.5.1.4

Description: Users require the capability to determine the available time between receipt of the

order and time of execution. The user will determine the allocation of the available time to developing the

command-estimate (commander's and staff's estimates), the combat decision-making process, and the quick

decision-making process.

Source Document: MCS UFD, Section 3.2.1.1.1.3.

Satisfaction Source: Extracted planning information data base files.

Determine the Planning Schedule for Command-Estimate 4.5.1.4.1

Description: Users require the capability to determine the allocation of the available time to the

development of the command-estimate. Determine the scope of the estimate given the constraints of time available.

Source Document: MCS UFD, Section 3.2.1.1.1.3.1.

Satisfaction Source: Extracted planning information data base files.

4-28

4.5.1.4.2 Determine the Planning Schedule for the Combat Decision-Making Process

<u>Description</u>: Users require the capability to determine the allocation of the available time to the development of the combat decision-making process.

Source Document: MCS UFD, Section 3.2.1.1.1.3.2.

Satisfaction Source: Extracted planning information data base files.

4.5.1.4.3 Determine the Planning Schedule for the Quick Decision-Making Process

<u>Description</u>: Users require the capability to determine the allocation of the available time to the execution of the quick decision-making process.

Source Document: MCS UFD, Section 3.2.1.1.1.3.3.

Satisfaction Source: Extracted planning information data base files.

4.5.1.4.4 Display Planning Schedules

<u>Description</u>: Users require the capability to display planning schedules showing allocation of available time for development of estimates and execution of troop-leading procedures.

Source Document: MCS UFD, Section 3.2.1.1.1.3.4.

Satisfaction Source: Planning schedule data base files.

4.5.1.4.5 Modify Planning Schedules

<u>Description</u>: Users require the capability to modify existing planning schedules, or create new planning schedules, to allocate time available to the development of estimates, decision-making processes, and the execution of troop-leading procedures.

Source Document: MCS UFD, Section 3.2.1.1.1.3.5.

Satisfaction Source: Extracted planning information and planning schedule data base files.

4.5.1.4.6 Print Planning Schedules

Description: Users require the capability to print the planning schedules on available equipment.

Source Document: MCS UFD, Section 3.2.1.1.1.3.6.

Satisfaction Source: Planning schedule data base files.

4.5.1.4.7 Store Planning Schedules

<u>Description</u>: Users require the capability to electronically store the planning schedules for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.1.3.7.

Satisfaction Source: Extracted planning information.

4.5.2 Begin Planning Process

<u>Description</u>: Users require the capability to begin the planning process for the development of the order.

Source Document: MCS UFD, Section 3.2.1.1.2.

Satisfaction Source: Extracted planning information data base files.

4.5.2.1 Distribute Planning Information

<u>Description</u>: Users require the capability to distribute planning information upon receipt of a warning order, planning order, OPLAN/OPORD, or other order information. Planning information is distributed to all staff and subordinate elements, plus any others involved in execution of the mission. Planning information is developed through analysis of the mission and time available.

Source Document: MCS UFD, Section 3.2.1.1.2.1.

Satisfaction Source: Extracted planning information data base files.

4.5.2.2 Receive Planning Information

Description: Users require the capability to receive the planning information in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.2.2.

Satisfaction Source: Extracted planning information data base files and higher headquarters.

4.5.2.3 Store Planning Information

<u>Description</u>: Users require the capability to electronically store the planning information for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.2.3.

Satisfaction Source: Extracted planning information data base files.

4.5.3 Manage Facts and Assumptions

<u>Description</u>: Users require the capability to manage lists of facts and assumptions pertinent to the planning process.

Source Document: MCS UFD, Section 3.2.1.1.3.

<u>Satisfaction Source</u>: Higher headquarters and the personnel resources, enemy situation, terrain analysis, weather information, friendly situation, NBC information, and supplies and equipment data base files.

4.5.3.1 Manage Facts Lists

<u>Description</u>: Users require the capability to manage the list facts having bearing upon the situation or operation in planning.

Source Document: MCS UFD, Section 3.2.1.1.3.1.

Satisfaction Source: Personnel resources, enemy situation, terrain analysis, weather information, friendly situation, NBC information, and supplies and equipment data base files.

4.5.3.1.1 Receive Facts Lists

<u>Description</u>: Users require the capability to receive facts in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.3.1.1.

<u>Satisfaction Source</u>: Higher headquarters and personnel resources, enemy situation, terrain analysis, weather information, friendly situation, NBC information, and supplies and equipment data base files.

4.5.3.1.2 Prepare Facts Lists

<u>Description</u>: Users require the capability to prepare facts lists using facts received, added, modified, and deleted.

Source Document: MCS UFD, Section 3.2.1.1.3.1.2.

<u>Satisfaction Source</u>: Higher headquarters and personnel resources, enemy situation, terrain analysis, weather information, friendly situation, NBC information, and supplies and equipment data base files.

4.5.3.1.3 Display Facts Lists

Description: Users require the capability to display facts lists in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.3.1.3.

Satisfaction Source: Facts lists data base files.

4.5.3.1.4 Store Facts List

<u>Description</u>: Users require the capability to electronically store facts lists for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.3.1.4.

<u>Satisfaction Source</u>: Higher headquarters and personnel resources, enemy situation, terrain analysis, weather information, friendly situation, NBC information, and supplies and equipment data base files.

4.5.3.1.5 Search for Facts Lists

Description: Users require the capability to search the facts list data base for a particular facts list.

Source Document: MCS UFD, Section 3.2.1.1.3.1.5.

Satisfaction Source: Facts lists data base files.

4.5.3.1.6 Retrieve Facts Lists

<u>Description</u>: Users require the capability to retrieve a particular facts list from the facts list data base.

Source Document: MCS UFD, Section 3.2.1.1.3.1.6.

Satisfaction Source: Facts lists data base files.

4.5.3.1.7 Modify Facts Lists

<u>Description</u>: Users require the capability to modify facts lists by changing existing facts, deleting facts, or appending new facts.

Source Document: MCS UFD, Section 3.2.1.1.3.1.7.

<u>Satisfaction Source</u>: Higher headquarters and facts lists, personnel resources, enemy situation, terrain analysis, weather information, friendly situation, NBC information, and supplies and equipment data base files.

4.5.3.1.8 Distribute Facts Lists

<u>Description</u>: Users require the capability to distribute facts lists to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.3.1.8.

Satisfaction Source: Facts lists data base files.

4.5.3.1.9 Delete Facts Lists

Description: Users require the capability to delete a facts list from the facts list data base.

Source Document: MCS UFD, Section 3.2.1.1.3.1.9.

Satisfaction Source: Facts lists data base files.

4.5.3.1.10 Print Facts Lists

Description: Users require the capability to print a facts list.

Source Document: MCS UFD, Section 3.2.1.1.3.1.10.

Satisfaction Source: Facts lists data base files.

4.5.3.1.11 Clear Facts Data Base

<u>Description</u>: Users require the capability to remove facts lists from electronic storage when they are no longer applicable to the planning process.

Source Document: MCS UFD, Section 3.2.1.1.3.1.11.

Satisfaction Source: Facts lists data base files.

4.5.3.2 Manage Assumptions List

<u>Description</u>: Users require a decision support capability that assists in reviewing and analyzing the results of the mission analysis, and political/military and option governing factors. It will help identify assumptions which, if they did not occur, would invalidate the contemplated operation. It will manage assumptions lists by receiving, preparing, displaying, storing, modifying, distributing, deleting, and printing assumptions lists. The user will also be able to search the assumptions data base for assumptions lists and retrieve assumptions lists from the assumptions data base. Finally, the user will be able to clear the assumptions data base of assumptions lists.

Source Documents: MCS UFD, Section 3.2.1.1.3.2; STACCS UFD, Section 3.2.2.4.2.3.

Satisfaction Source: Higher headquarters and user-defined.

4.5.3.2.1 Receive Assumptions List

<u>Description</u>: Users require the capability to receive assumptions in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.3.2.1.

Satisfaction Source: Higher headquarters.

4.5.3.2.2 Prepare Assumptions List

<u>Description</u>: Users require the capability to prepare the assumptions list using assumptions received, added, modified, and deleted. The assumptions list is then identified.

Source Document: MCS UFD, Section 3.2.1.1.3.2.2.

Satisfaction Source: Higher headquarters and user-defined.

4.5.3.2.3 Display Assumptions List

Description: Users require the capability to display assumptions in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.3.2.3.

Satisfaction Source: Assumptions list data base files.

4.5.3.2.4 Store Assumptions List

<u>Description</u>: Users require the capability to electronically store the assumptions list for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.3.2.4.

Satisfaction Source: Higher headquarters and user-defined.

4.5.3.2.5 Modify Assumptions List

<u>Description</u>: Users require the capability to amend the assumptions list by modifying existing assumptions or appending new assumptions.

Source Document: MCS UFD, Section 3.2.1.1.3.2.5.

Satisfaction Source: Higher headquarters, user-defined, and assumptions lists data base files.

4.5.3.2.6 Distribute Assumptions List

<u>Description</u>: Users require the capability to distribute the assumptions list to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.3.2.6.

Satisfaction Source: Assumptions list data base files.

4.5.3.2.7 Delete Assumptions List

<u>Description</u>: Users require the capability to delete an assumptions list from the assumptions data base.

Source Document: MCS UFD, Section 3.2.1.1.3.2.7.

Satisfaction Source: Assumptions list data base files.

4.5.3.2.8 Print Assumptions List

Description: Users require the capability to print an assumptions list.

Source Document: MCS UFD, Section 3.2.1.1.3.2.8.

Satisfaction Source: Assumptions list data base files.

4.5.3.2.9 Clear Assumptions Data Base

<u>Description</u>: Users require the capability to remove all assumptions lists from electronic storage.

Source Document: MCS UFD, Section 3.2.1.1.3.2.9.

Satisfaction Source: Assumptions list data base files.

4.5.3.2.10 Search for Assumptions List

<u>Description</u>: Users require the capability to locate a particular assumptions list in the assumptions data base.

Source Document: MCS UFD, Section 3.2.1.1.3.2.10.

Satisfaction Source: Assumptions list data base files.

4.5.3.2.11 Retrieve Assumptions List

<u>Description</u>: Users require the capability to retrieve a particular assumptions list from the assumptions data base.

Source Document: MCS UFD, Section 3.2.1.1.3.2.11.

Satisfaction Source: Assumptions list data base files.

4.5.4 Analyze the Mission

<u>Description</u>: Users require tools to review taskings and guidance to determine what has to be done, when, and where. The mission is analyzed through identification of the enemy's center of gravity, determining restrictions and constraints, identification of specified, implied and essential tasks, time analysis, issue of the restated mission and commander's planning guidance, preparation and distribution of the warning order, and conduct of the mission analysis brief.

Source Documents: MCS UFD, Section 3.2.1.1.4; STACCS UFD, Section 3.2.2.4.2; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8; AGCCS SSS, Section 3.2.1.4.5.2.3.

<u>Satisfaction Source</u>: Higher headquarters, user-defined based on analysis of the situation, and extracted planning information data base files.

4.5.4.1 Identify the Enemy's Center of Gravity

<u>Description</u>: Users require the capability to identify the enemy's center of gravity through analysis of enemy dispositions, equipment, doctrine, capabilities, and probable COAs.

Source Documents: MCS UFD, Section 3.2.1.1.4.1; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Enemy situation data base files.

4.5.4.2 Determine Restrictions/Constraints

<u>Description</u>: Users require the capability to determine restrictions and constraints on friendly forces.

Source Documents: MCS UFD, Section 3.2.1.1.4.2; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Higher headquarters and analysis of the situation.

4.5.4.2.1 Identify Restrictions

<u>Description</u>: Users require the capability to identify restrictions applicable to the situation or operation in planning.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.

Satisfaction Source: Higher headquarters.

4.5.4.2.1.1 Receive Restrictions List

<u>Description</u>: Users require the capability to receive restrictions lists in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.1.

Satisfaction Source: Higher headquarters.

4.5.4.2.1.2 Display Restrictions List

<u>Description</u>: Users require the capability to display restrictions in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.2.

Satisfaction Source: Restrictions list data base files.

4.5.4.2.1.3 Prepare Restrictions List

<u>Description</u>: Users require the capability to prepare the restrictions lists using restrictions received, added, modified, and deleted.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.3.

Satisfaction Source: Higher headquarters and user-defined.

4.5.4.2.1.3.1 Add Restrictions

<u>Description</u>: Users require the capability to append the restrictions list by adding new restrictions.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.3.1.

Satisfaction Source: Higher headquarters and user-defined.

4.5.4.2.1.3.2 Modify Restrictions

<u>Description</u>: Users require the capability to amend the restrictions list by modifying existing restrictions.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.3.2.

Satisfaction Source: Higher headquarters and user-defined.

4.5.4.2.1.3.3 Delete Restrictions

<u>Description</u>: Users require the capability to amend the restrictions list by deleting existing restrictions.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.3.3.

Satisfaction Source: Restrictions list data base files.

4.5.4.2.1.4 Store Restrictions List

<u>Description</u>: Users require the capability to electronically store the restrictions list for future retrieval, modification, or archival.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.4.

Satisfaction Source: Higher headquarters and user-defined.

4.5.4.2.1.5 Distribute Restrictions List

<u>Description</u>: Users require the capability to distribute the restrictions list to staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.5.

Satisfaction Source: Restrictions list data base files.

4.5.4.2.1.6 Clear Restrictions Data Base

<u>Description</u>: Users require the capability to remove restrictions from electronic storage when they are no longer applicable to the planning process or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.2.1.6.

Satisfaction Source: Restrictions list data base files.

4.5.4.2.2 Identify Constraints

<u>Description</u>: Users require the capability to identify constraints applicable to the situation or operation in planning.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.

Satisfaction Source: Higher headquarters and analysis of the situation.

4.5.4.2.2.1 Receive Constraints List

<u>Description</u>: Users require the capability to receive constraints in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.1.

Satisfaction Source: Higher headquarters.

4.5.4.2.2.2 Display Constraints List

Description: Users require the capability to display constraints in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.2.

Satisfaction Source: Constraints list data base files.

4.5.4.2.2.3 Prepare Constraints List

<u>Description</u>: Users require the capability to prepare the constraints list using constraints received, added, modified, and deleted.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.3.

Satisfaction Source: Higher headquarters and analysis of the situation.

4.5.4.2.2.3.1 Add Constraints

Description: Users require the capability to append the constraints list by adding new constraints.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.3.1.

Satisfaction Source: User-defined based on analysis of the situation.

4.5.4.2.2.3.2 Modify Constraints

<u>Description</u>: Users require the capability to amend the constraints list by modifying existing constraints.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.3.2.

Satisfaction Source: User-defined based on analysis of the situation.

4.5.4.2.2.3.3 Delete Constraints

<u>Description</u>: Users require the capability to amend the constraints list by deleting existing constraints.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.3.3.

Satisfaction Source: Constraints list data base files.

4.5.4.2.2.4 Store Constraints List

<u>Description</u>: Users require the capability to electronically store the constraints list for future retrieval, modification, or archival.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.4.

Satisfaction Source: Higher headquarters and user-defined based on analysis of the situation.

4.5.4.2.2.5 Distribute Constraints List

<u>Description</u>: Users require the capability to distribute the constraints list to staff and subordinate elements, plus any others involved in the planning process.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.5.

Satisfaction Source: Constraints list data base files.

4.5.4.2.2.6 Clear Constraints Data Base

<u>Description</u>: Users require the capability to remove constraints from electronic storage when they are no longer applicable to the planning process.

Source Document: MCS UFD, Section 3.2.1.1.4.2.2.6.

Satisfaction Source: Constraints list data base files.

4.5.4.3 Identify Specified Tasks

<u>Description</u>: Users require the capability to identify specified tasks through analysis of the higherechelon mission and execution paragraphs.

Source Documents: MCS UFD, Section 3.2.1.1.4.3; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.1 Receive Specified Tasks List

<u>Description</u>: Users require the capability to receive specified tasks in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.3.1.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.2 Display Specified Tasks List

Description: Users require the capability to display specified tasks in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.3.2.

Satisfaction Source: Specified tasks list data base files.

4.5.4.3.3 Prepare Specified Tasks List

<u>Description</u>: Users require the capability to prepare the specified tasks list using specified tasks copied from the higher-echelon order, and tasks added, modified, and deleted.

Source Document: MCS UFD, Section 3.2.1.1.4.3.3.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.3.1 Copy Specified Tasks From Order

<u>Description</u>: Users require the capability to append the specified tasks list by copying tasks from the higher-echelon order.

Source Document: MCS UFD, Section 3.2.1.1.4.3.3.1.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.3.2 Add Specified Tasks

<u>Description</u>: Users require the capability to amend the specified tasks list by adding new tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.3.3.2.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.3.3 Modify Specified Tasks

<u>Description</u>: Users require the capability to amend the specified tasks list by modifying existing tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.3.3.3.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.3.4 Delete Specified Tasks

<u>Description</u>: Users require the capability to amend the specified tasks list by deleting existing tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.3.3.4.

Satisfaction Source: Specified tasks list data base files.

4.5.4.3.4 Store Specified Tasks List

<u>Description</u>: Users require the capability to electronically store the specified tasks list for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.4.3.4.

Satisfaction Source: Extracted planning information data base files.

4.5.4.3.5 Distribute Specified Tasks List

<u>Description</u>: Users require the capability to distribute the specified tasks list to staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.3.5.

Satisfaction Source: Specified tasks list data base files.

4.5.4.3.6 Clear Tasks Data Base

<u>Description</u>: Users require the capability to remove tasks from electronic storage when they are no longer applicable to the planning process.

Source Document: MCS UFD, Section 3.2.1.1.4.3.6.

Satisfaction Source: Specified tasks list data base files.

4.5.4.4 Identify Implied Tasks

<u>Description</u>: Users require the capability to identify implied tasks through analysis of the higher-echelon mission and execution paragraphs.

Source Documents: MCS UFD, Section 3.2.1.1.4.4; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Extracted planning information data base files.

4.5.4.4.1 Receive Implied Tasks List

Description: Users require the capability to receive implied tasks in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.4.1.

Satisfaction Source: Extracted planning information data base files.

4.5.4.4.2 Display Implied Tasks List

<u>Description</u>: Users require the capability to display implied tasks in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.4.2.

Satisfaction Source: Implied tasks list data base files.

4.5.4.4.3 Prepare Implied Tasks List

<u>Description</u>: Users require the capability to prepare the implied tasks list using tasks received, added, modified, and deleted.

Source Document: MCS UFD, Section 3.2.1.1.4.4.3.

Satisfaction Source: Extracted planning information data base files.

4.5.4.4.3.1 Add Implied Tasks

Description: Users require the capability to append the implied tasks list by adding new tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.4.3.1.

Satisfaction Source: Extracted planning information data base files.

4.5.4.4.3.2 Modify Implied Tasks

<u>Description</u>: Users require the capability to amend the implied tasks list by modifying existing tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.4.3.2.

Satisfaction Source: Extracted planning information data base files.

4.5.4.4.3.3 Delete Implied Tasks

Description: Users require the capability to amend the implied tasks list by deleting existing tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.4.3.3.

Satisfaction Source: Implied tasks list data base files.

4.5.4.4.4 Store Implied Tasks List

<u>Description</u>: Users require the capability to electronically store the implied tasks list for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.4.4.4.

Satisfaction Source: Extracted planning information data base files.

4.5.4.4.5 Distribute Implied Tasks List

<u>Description</u>: Users require the capability to distribute the implied tasks list to staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.4.5.

Satisfaction Source: Implied tasks list data base files.

4.5.4.5 Identify Essential Tasks

<u>Description</u>: Users require the capability to identify essential tasks through analysis of the specified tasks list, the implied tasks list, and the higher-echelon mission and execution paragraphs.

Source Documents: MCS UFD, Section 3.2.1.1.4.5; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

<u>Satisfaction Source</u>: Extracted planning information and specified and implied tasks lists data base files.

4.5.4.5.1 Display Essential Tasks List

<u>Description</u>: Users require the capability to display essential tasks in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.4.5.1.

Satisfaction Source: Essential tasks list data base files.

4.5.4.5.2 Prepare Essential Tasks List

<u>Description</u>: Users require the capability to prepare the essential tasks list by designating essential tasks, adding tasks, modifying tasks, and deleting tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.5.2.

<u>Satisfaction Source</u>: Extracted planning information and specified and implied tasks lists data base files.

4.5.4.5.2.1 Designate Essential Tasks

<u>Description</u>: Users require the capability to designate essential tasks through analysis of the specified tasks list, the implied tasks list, and the higher-echelon mission and execution paragraphs.

Source Document: MCS UFD, Section 3.2.1.1.4.5.2.1.

<u>Satisfaction Source</u>: Extracted planning information and specified and implied tasks lists data base files.

4.5.4.5.2.2 Add Essential Tasks

Description: Users require the capability to append the essential tasks list by adding new tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.5.2.2.

Satisfaction Source: Extracted planning information and specified and implied tasks lists data base

files.

tasks.

files.

4.5.4.5.2.3 Modify Essential Tasks

<u>Description</u>: Users require the capability to amend the essential tasks list by modifying existing

Source Document: MCS UFD, Section 3.2.1.1.4.5.2.3.

Satisfaction Source: Extracted planning information and specified and implied tasks lists data base

4.5.4.5.2.4 Delete Essential Tasks

Description: Users require the capability to amend the essential tasks list by deleting existing tasks.

Source Document: MCS UFD, Section 3.2.1.1.4.5.2.4.

Satisfaction Source: Essential tasks list data base files.

4.5.4.5.3 Store Essential Tasks List

<u>Description</u>: Users require the capability to electronically store the essential tasks list for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.4.5.3.

Satisfaction Source: Extracted planning information and specified and implied tasks lists data base

files.

4.5.4.5.4 Distribute Essential Tasks List

<u>Description</u>: Users require the capability to distribute the essential tasks list to staff and subordinate elements, plus any others involved in the development of the plan or the execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.5.4.

Satisfaction Source: Essential tasks list data base files.

4.5.4.6 Conduct Initial Time Analysis

<u>Description</u>: Users require the capability to determine the time available to plan, the time available for the decision-cycle, the unit movement schedule, synchronization/execution requirements, preparation requirements, the time of order issue, and the time available to prepare a thorough time analysis.

Source Documents: MCS UFD, Section 3.2.1.1.4.6; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.1 Determine Time Available to Plan

<u>Description</u>: Users require the capability to determine the start time and end time for the planning

process.

Source Document: MCS UFD, Section 3.2.1.1.4.6.1.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.2 Determine Time for Decision-Cycle

<u>Description</u>: Users require the capability to determine the start time, end time, and the event schedule for executing the decision-cycle.

Source Document: MCS UFD, Section 3.2.1.1.4.6.2.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.3 Determine Unit Movement Schedule

<u>Description</u>: Users require the capability to determine the start time, end time, and the event schedule for unit movement.

Source Document: MCS UFD, Section 3.2.1.1.4.6.3.

Satisfaction Source: Extracted planning information and friendly situation data base files.

4.5.4.6.4 Determine Synchronization/Execution Requirements

<u>Description</u>: Users require the capability to determine the time available for addressing synchronization and execution requirements.

Source Document: MCS UFD, Section 3.2.1.1.4.6.4.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.5 Determine Preparation Requirements

<u>Description</u>: Users require the capability to determine the start time, end time, and the event schedule for addressing preparation requirements. This function will also address preparations for movement and combat.

Source Document: MCS UFD, Section 3.2.1.1.4.6.5.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.6 Determine Time of Order Issue

<u>Description</u>: Users require the capability to determine the time of order issue through analysis of the time available between receipt of the higher-echelon order and the time of execution of the mission. Allocate no more than 1/3 of the available time to preparation and issue of the order to subordinate elements.

Source Document: MCS UFD, Section 3.2.1.1.4.6.6.

Satisfaction Source: User-defined.

4.5.4.6.7 Prepare Time Analysis

<u>Description</u>: Users require the capability to prepare a thorough time analysis and develop event schedule to support development of plan, issue to subordinates, and preparation for execution.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.7.1 Receive Other Time Analysis

<u>Description</u>: Users require the capability to receive other time analyses in doctrinally correct, usable formats.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.1.

Satisfaction Source: Higher headquarters.

4.5.4.6.7.2 Perform PERT Chart Functions

<u>Description</u>: Users require the capability to perform PERT chart functions as necessary to assist analysis of time available. Increment in quarter-hour blocks as required.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.2.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.7.3 Perform Gantt Chart Functions

<u>Description</u>: Users require the capability to perform Gantt chart functions as necessary to assist analysis of time available and to produce event schedules of sufficient detail to support development of plan, issue to subordinates, preparation for execution, and execution monitoring.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.3.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.7.4 Display Time Analysis

<u>Description</u>: Users require the capability to display time analysis in usable formats, sufficient for development of plans and preparation for execution.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.4.

Satisfaction Source: Time analysis data base files.

4.5.4.6.7.5 Modify Time Analysis

<u>Description</u>: Users require the capability to modify time analyses to account for changes in friendly or enemy situations, missions, or commander's guidance.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.5.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.7.6 Delete Time Analysis

<u>Description</u>: Users require the capability to delete time analyses when they are no longer applicable to the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.6.

Satisfaction Source: Time analysis data base files.

4.5.4.6.7.7 Store Time Analysis

<u>Description</u>: Users require the capability to store time analyses electronically for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.7.

Satisfaction Source: Extracted planning information data base files.

4.5.4.6.7.8 Clear Time Analysis Data Base

<u>Description</u>: Users require the capability to remove time analyses from electronic storage when they are no longer applicable to the planning process.

Source Document: MCS UFD, Section 3.2.1.1.4.6.7.8.

Satisfaction Source: Time analysis data base files.

4.5.4.6.8 Distribute Time Analysis

<u>Description</u>: Users require the capability to distribute time analyses to staff and subordinate elements, plus any others involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.4.6.8.

Satisfaction Source: Time analysis data base files.

4.5.4.7 Issue Restated Mission

<u>Description</u>: Users require the capability to issue the restated mission through formulation of the restated mission, and distribution and storage of the restated mission.

Source Documents: MCS UFD, Section 3.2.1.1.4.7; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

<u>Satisfaction Source</u>: Extracted planning information, specified, implied, and essential tasks lists, and time analysis data base files.

4.5.4.7.1 Formulate Restated Mission

<u>Description</u>: Users require the capability to formulate the restated mission through analysis of higher-echelon mission and execution paragraphs, specified, implied, and essential tasks lists, and time analyses.

Source Document: MCS UFD, Section 3.2.1.1.4.7.1.

<u>Satisfaction Source</u>: Extracted planning information, specified, implied, and essential tasks lists, and time analysis data base files.

4.5.4.7.2 Distribute Restated Mission

<u>Description</u>: Users require the capability to distribute the restated mission to staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.7.2.

Satisfaction Source: Restated mission data base files.

4.5.4.7.3 Store Restated Mission

<u>Description</u>: Users require the capability to store the restated mission electronically for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.4.7.3.

<u>Satisfaction Source</u>: Extracted planning information, specified, implied, and essential tasks lists, and time analysis data base files.

4.5.4.8 Issue Commander's Planning Guidance

<u>Description</u>: Users require the capability to issue the commander's planning guidance to the staff and subordinate elements involved in development of the plan.

Source Documents: MCS UFD, Section 3.2.1.1.4.8; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: Commander and planning guidance data base files.

4.5.4.8.1 Determine the Commander's Planning Guidance

<u>Description</u>: Users require the capability to determine the commander's planning guidance and issue it to the staff and subordinate elements involved in development of the plan.

Source Documents: FM 101-5, Chapter 4, Section I; FBCB2 UFD, Sections 3.4.6.7.1 & 3.4.6.8.1.

Satisfaction Source: Commander.

4.5.4.8.1.1 Issue Commander's Concept of Operation

<u>Description</u>: Users require the capability to issue the commander's concept of operation to the staff and subordinate elements involved in development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.

Satisfaction Source: Commander.

4.5.4.8.1.1.1 Issue Guidance on Close Operations

<u>Description</u>: Users require the capability to issue planning guidance for the conduct of close operations to the staff and subordinate elements involved in development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.1.

Satisfaction Source: Commander.

Issue Guidance on Reconnaissance/Security Operations 4.5.4.8.1.1.2

Users require the capability to issue planning guidance for the conduct of Description:

reconnaissance and security operations to the staff and subordinate elements involved in development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.2.

Satisfaction Source: Commander.

Issue Guidance on Reserve Operations 4.5.4.8.1.1.3

Description: Users require the capability to issue planning guidance for the designation and

implementation of the reserve force to the staff and subordinate elements involved in development of the plan, as

appropriate.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.3.

Satisfaction Source: Commander.

Issue Guidance on Deep Operations 4.5.4.8.1.1.4

Description: Users require the capability to issue planning guidance for the conduct of deep

operations to the staff and subordinate elements involved in development of the plan, as appropriate.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.4.

Satisfaction Source: Commander.

4.5.4.8.1.1.5 Issue Guidance on Rear Operations

<u>Description</u>: Users require the capability to issue planning guidance for the conduct of rear operations to the staff and subordinate elements involved in development of the plan, as appropriate.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.5.

Satisfaction Source: Commander.

4.5.4.8.1.1.6 Issue Guidance on Command and Control Warfare (C2W) Operations

<u>Description</u>: Users require the capability to issue planning guidance for the conduct of Command and Control Warfare (C2W) to the staff and subordinate elements involved in development of the plan, as appropriate.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.6.

Satisfaction Source: Commander.

4.5.4.8.1.1.7 Issue Guidance on Main Battle Area (MBA)

<u>Description</u>: Users require the capability to issue planning guidance for the conduct of operations within the MBA to the staff and subordinate elements involved in development of the plan, as appropriate.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.7.

Satisfaction Source: Commander.

4.5.4.8.1.1.8 Issue Guidance on Scheme of Maneuver

<u>Description</u>: Users require the capability to issue planning guidance for the scheme of maneuver to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.1.8.

4.5.4.8.1.1.9 Issue Guidance on Psychological Operations (PSYOPS)

Description: Users require the capability to issue planning guidance for the conduct of PSYOPS

to staff and subordinate elements involved in development of the plan, as appropriate.

Source Document: MCS UFD, Sections 3.2.1.1.4.8.1.9 & 3.2.1.1.4.8.3.8.

Satisfaction Source: Commander.

4.5.4.8.1.1.10 Issue Guidance on Risk Assessment

Description: Users require the capability to issue the commander's planning guidance for risk

assessment to staff and subordinate elements in development of the plan.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

Description: Users require the capability to issue the commander's planning guidance for the

desired effects on enemy forces.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

4.5.4.8.1.1.12 Issue Guidance on NBC Usage

Description: Users require the capability to issue the commander's planning guidance on NBC

usage.

Source Document: C&GSC ST 100-9, Section 2-5a.

4.5.4.8.1.2 Issue Commander's Intent

<u>Description</u>: Users require the capability to issue the commander's intent to the staff and subordinate elements involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.2.

Satisfaction Source: Commander.

4.5.4.8.1.3 Issue Commander's Intelligence Priorities

<u>Description</u>: Users require the capability to issue the commander's intelligence priorities to the staff and subordinate elements involved in the development of the plan or execution of the mission.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

4.5.4.8.1.3.1 Issue Guidance on IPB Considerations

<u>Description</u>: Users require the capability to issue the commander's planning guidance on IPB considerations to staff and subordinate elements in development of the plan.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

4.5.4.8.1.3.2 Issue Guidance on Enemy COAs to Consider

<u>Description</u>: Users require the capability to issue the commander's planning guidance on enemy COAs to consider to staff and subordinate elements in development of the plan.

Source Document: C&GSC ST 100-9, Section 2-5a.

Issue Guidance on Key or Decisive Terrain 4.5.4.8.1.3.3

Description: Users require the capability to issue the commander's planning guidance on key or

decisive terrain to staff and subordinate elements in development of the plan.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

Manage Sustainment Priorities 4.5.4.8.1.4

Description: Users require the capability to issue sustainment priorities to the staff and subordinate

elements involved in development of the plan or execution of the mission. Sustainment priorities address force

manning, arming, fueling, maintenance, transportation, rear area support, and reconstitution priorities.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.

Satisfaction Source: Commander.

Manage Force Manning Priorities 4.5.4.8.1.4.1

Description: Users require the capability to issue force manning priorities to the staff and

subordinate elements involved in development of the plan or execution of the mission. The user will be able to

receive, display, store, print, and distribute the commander's priorities. Users will be able to prepare and modify the

commander's priorities. The user will also be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.1.

Satisfaction Source: Commander.

4.5.4.8.1.4.2 Manage Force Arming Priorities

<u>Description</u>: Users require the capability to issue force arming priorities to the staff and subordinate

elements involved in development of the plan or execution of the mission. The user will be able to receive, display,

store, print, and distribute the commander's priorities. Users will be able to prepare and modify the commander's

priorities. The user will be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.2.

Satisfaction Source: Commander.

Manage Force Fueling Priorities 4.5.4.8.1.4.3

<u>Description</u>: Users require the capability to issue force fueling priorities to the staff and subordinate

elements involved in development of the plan or execution of the mission. The user will be able to receive, display,

store, print, and distribute the commander's priorities. Users will be able to prepare and modify the commander's

priorities. The user will be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.3.

Satisfaction Source: Commander.

4.5.4.8.1.4.4 Manage Force Maintenance Priorities

<u>Description</u>: Users require the capability to issue force maintenance priorities to the staff and

subordinate elements involved in development of the plan or execution of the mission. The user will be able to

receive, display, store, print, and distribute the commander's priorities. Users will be able to prepare and modify the

commander's priorities. The user will be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.4.

Satisfaction Source: Commander.

Manage Force Transportation Priorities 4.5.4.8.1.4.5

Description: Users require the capability to issue force transportation priorities to the staff and

subordinate elements involved in development of the plan or execution of the mission. The user will be able to

receive, display, store, print, and distribute the commander's priorities. Users will be able to prepare and modify the

commander's priorities. The user will be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.5.

Satisfaction Source: Commander.

Manage Force Rear Area Support Priorities . 4.5.4.8.1.4.6

Description: Users require the capability to issue rear area support priorities to the staff and

subordinate elements involved in development of the plan or execution of the mission. The user will be able to

receive, display, store, print, and distribute the commander's priorities. Users will be able to prepare and modify the

commander's priorities. The user will be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.6.

Satisfaction Source: Commander.

Manage Reconstitution Priorities 4.5.4.8.1.4.7

Description: Users require the capability to issue reconstitution priorities to the staff and

subordinate elements involved in development of the plan or execution of the mission. The user will be able to

receive, display, store, print, and distribute the commander's priorities. Users will be able to prepare and modify the

commander's priorities. The user will be able to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.4.8.3.7.

Satisfaction Source: Commander.

4.5.4.8.1.5 Issue Commander's Deception Objective

<u>Description</u>: Users require the capability to issue the objective of the commander's deception plan to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.4.

Satisfaction Source: Commander.

4.5.4.8.1.6 Issue Commander's Combat Support Priorities

<u>Description</u>: Users require the capability to issue the commander's combat support priorities consisting of fire support, air defense, engineer, intelligence and electronic warfare (IEW), and aviation support to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.5.

Satisfaction Source: Commander.

4.5.4.8.1.6.1 Allocate Fire Support Priorities

<u>Description</u>: Users require the capability to allocate the commander's fire support priorities addressing air, chemical, field artillery, nuclear fires, and naval gunfire support to the subordinate maneuver elements. The allocations are issued to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.5.1.

Satisfaction Source: Commander.:

4.5.4.8.1.6.2 Allocate Air Defense Priorities of Support

<u>Description</u>: Users require the capability to allocate the commander's air defense support priorities addressing priority of protection and issued to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.5.2.

Satisfaction Source: Commander.

Allocate Engineer Priorities of Support 4.5.4.8.1.6.3

Description: Users require the capability to allocate the commander's engineer support priorities

addressing mobility, countermobility, and survivability and issued to the staff and subordinate elements involved in

development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.5.3.

Satisfaction Source: Commander.

Allocate IEW Priorities of Support 4.5.4.8.1.6.4

Description: Users require the capability to allocate the commander's IEW support priorities

addressing organic unit collection efforts to support the scheme of maneuver, and collection and jamming of targets

and issued to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.5.4.

Satisfaction Source: Commander.

Allocate Aviation Priorities of Support 4.5.4.8.1.6.5

Description: Users require the capability to allocate the commander's aviation support priorities

addressing maneuver, reconnaissance, lift, and command and control and issued to the staff and subordinate elements

involved in development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.8.5.5.

Satisfaction Source: Commander.

4.5.4.8.1.7 Issue Command and Control (C2) Arrangements

<u>Description</u>: Users require the capability to issue the commander's guidance on C2 arrangements to the staff and subordinate elements involved in development of the plan or execution of the mission. These arrangements include signals, automation support, command post location and organization, and order of command succession.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

4.5.4.8.1.8 Issue Commander's Critical Information Requirements (CCIR)

<u>Description</u>: Users require the capability to issue the commander's critical information requirements to the staff and subordinate elements involved in development of the plan or execution of the mission.

Source Document: C&GSC ST 100-9, Section 2-5a.

Satisfaction Source: Commander.

4.5.4.8.1.9 Determine the Type of Order

<u>Description</u>: Users require the capability to determine the type of order appropriate to the operation, either administrative or combat.

Source Document: MCS UFD, Section 3.2.1.1.4.8.6.

Satisfaction Source: Commander.

4.5.4.8.1.9.1 Use the Fragmentary Order

<u>Description</u>: Following COA development and analysis, users require the capability to issue the order will using the FRAGO format.

Source Document: FM 101-5, Chapter 4, Section I.

4.5.4.8.1.9.2 Use the Oral Order

<u>Description</u>: Following COA development and analysis, users require the capability to issue the order will using the oral order format.

Source Document: FM 101-5, Chapter 4, Section I.

Satisfaction Source: Commander.

4.5.4.8.1.9.3 Use the Overlay Order

<u>Description</u>: Following COA development and analysis, users require the capability to issue the order will using the overlay order format.

Source Document: FM 101-5, Chapter 4, Section I.

Satisfaction Source: Commander.

4.5.4.8.1.9.4 Use the Open Blank Order

<u>Description</u>: Following COA development and analysis, users require the capability to issue the order will using the open blank order format.

Source Document: FM 101-5, Chapter 4, Section I.

Satisfaction Source: Commander.

4.5.4.8.1.9.5 Use the Five-Paragraph Written Order

<u>Description</u>: Following COA development and analysis, users require the capability to issue the order will using the five-paragraph written order format.

Source Document: FM 101-5, Chapter 4, Section I.

4.5.4.8.1.9.6 Decision on the Type of Order

<u>Description</u>: Users require the capability to determine the type of order the force will use and issues guidance to subordinates on which type to use.

Source Document: FM 101-5, Chapter 4, Section I.

Satisfaction Source: Commander.

4.5.4.8.1.10 Determine the Type of Rehearsal

<u>Description</u>: Users require the capability to determine the type(s) of rehearsal(s) best suited to the operation using the considerations of mission, enemy, terrain, troops, and time (METT-T) available.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.

Satisfaction Source: Commander.

4.5.4.8.1.10.1 Use Confirmation Brief

<u>Description</u>: Users require the capability to brief the commander on the operation and his or her role in the execution of the plan.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.1.

Satisfaction Source: Commander.

4.5.4.8.1.10.2 Use Map Rehearsal

<u>Description</u>: Users require the capability to conduct a map rehearsal with his or her subordinates.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.2.

4.5.4.8.1.10.3 Use Sketch-Map Rehearsal

Description: Users require the capability to conducts a sketch-map rehearsal with his or her

subordinates.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.3.

Satisfaction Source: Commander.

4.5.4.8.1.10.4 Use Terrain Model Rehearsal

Description: Users require the capability to conduct a terrain model rehearsal with his or her

subordinates.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.4.

Satisfaction Source: Commander.

4.5.4.8.1.10.5 Use Key Leader Rehearsal

Description: Users require the capability to conduct a key leader rehearsal with his or her

subordinates.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.5.

Satisfaction Source: Commander.

4.5.4.8.1.10.6 Use Full Force Rehearsal

Description: Users require the capability to conduct a full force rehearsal with his or her

subordinates.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.6.

4.5.4.8.1.10.7 Decision on Type of Rehearsal

<u>Description</u>: Users require the capability to determines the type(s) of rehearsal(s) the force will use and issues guidance to subordinates on which type to use.

Source Document: MCS UFD, Section 3.2.1.1.4.8.7.7.

Satisfaction Source: Commander.

4.5.4.8.2 Modify Commander's Planning Guidance

<u>Description</u>: Users require the capability to amend the commander's planning guidance by modifying existing guidance.

Source Document: FBCB2 UFD, Sections 3.4.6.7.3 & 3.4.6.8.3.

Satisfaction Source: Commander.

4.5.4.8.3 Store Commander's Planning Guidance

<u>Description</u>: Users require the capability to electronically store the commander's planning guidance for future retrieval, modification, and archival.

Source Document: FBCB2 UFD, Sections 3.4.6.7.4 & 3.4.6.8.4.

Satisfaction Source: Commander.

4.5.4.8.4 Delete Commander's Planning Guidance

<u>Description</u>: Users require the capability to amend the commander's planning guidance by deleting existing guidance.

Source Document: FBCB2 UFD, Sections 3.4.6.7.5 & 3.4.6.8.5.

Satisfaction Source: Planning guidance data base files.

4.5.4.8.5 Display Commander's Planning Guidance

Description: Users require the capability to display the commander's planning guidance in a useable

format.

Source Document: FBCB2 UFD, Sections 3.4.6.7.6 & 3.4.6.8.6.

Satisfaction Source: Planning guidance data base files.

4.5.4.8.6 Print Commander's Planning Guidance

Description: Users require the capability to print the commander's planning guidance in a useable

format.

Source Document: FBCB2 UFD, Sections 3.4.6.7.7 & 3.4.6.8.7.

Satisfaction Source: Planning guidance data base files.

4.5.2.8.7 Query Commander's Planning Guidance

<u>Description</u>: Users require the capability to query the commander's planning guidance data base

for specific planning guidance.

Source Document: FBCB2 UFD, Sections 3.4.6.7.8 & 3.4.6.8.8.

Satisfaction Source: Planning guidance data base files.

4.5.4.8.8 Distribute Commander's Planning Guidance

<u>Description</u>: Users require the capability to distribute the commander's planning guidance to staff

and subordinate elements, plus any others involved in the development of the plan or the execution of the mission.

Source Document: FBCB2 UFD, Sections 3.4.6.7.9 & 3.4.6.8.9.

Satisfaction Source: Planning guidance data base files.

4.5.4.9 Prepare/Distribute Warning Order

<u>Description</u>: Users require the capability to prepare and distribute the warning order upon receipt of a warning order, FRAGO, or OPLAN/OPORD from higher headquarters, or upon anticipation of a change in mission.

Source Document: MCS UFD, Section 3.2.1.1.4.9.

<u>Satisfaction Source</u>: Extracted planning information, friendly and enemy situation, tasks lists, restated mission, and planning guidance data base files.

4.5.4.9.1 Prepare/Issue Warning Order

<u>Description</u>: Users require the capability to prepare the warning order and issue it to the staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.

<u>Satisfaction Source</u>: Extracted planning information, friendly and enemy situation, tasks lists, restated mission, and planning guidance data base files.

4.5.4.9.1.1 Compile Warning Order

<u>Description</u>: Users require the capability to compile the warning order from available information.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.

<u>Satisfaction Source</u>: Extracted planning information, friendly and enemy situation, tasks lists, restated mission, and planning guidance data base files.

4.5.4.9.1.1.1 Display Own Warning Order

<u>Description</u>: Users require the capability to display the warning order in a doctrinally correct format.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.1.

Satisfaction Source: Orders data base files.

4.5.4.9.1.1.2 Compile Situation Paragraph

<u>Description</u>: Users require the capability to compile the current situation paragraph from available information and sources. Components are the enemy situation, friendly situation, and attachments and detachments paragraphs.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.

Satisfaction Source: Extracted planning information and friendly and enemy situation data base files.

4.5.4.9.1.1.2.1 Compile Enemy Situation Paragraph

<u>Description</u>: Users require the capability to compile the enemy situation paragraph within the situation paragraph from available information and sources, and from the higher-echelon unit's enemy situation paragraph.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.1.

Satisfaction Source: Extracted planning information and enemy situation data base files.

4.5.4.9.1.1.2.2 Compile Friendly Situation Paragraph

<u>Description</u>: Users require the capability to compile the friendly situation paragraph within the situation paragraph from available sources, and from the higher-echelon unit's friendly situation paragraph.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.2.

Satisfaction Source: Extracted planning information and friendly situation data base files.

4.5.4.9.1.1.2.2.1 Compile Higher-Echelon Mission Paragraph

<u>Description</u>: Users require the capability to compile the higher-echelon unit's mission paragraph within the friendly situation paragraph with information extracted from the mission paragraph of the higher-echelon unit's order.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.2.1.

Satisfaction Source: Extracted planning information data base files.

4.5.4.9.1.1.2.2.2 Prepare Adjacent Unit Mission Paragraph

<u>Description</u>: Users require the capability to prepare the adjacent unit's mission paragraph within the friendly situation paragraph with information extracted from the mission paragraph of the adjacent unit's order.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.2.2.

Satisfaction Source: Extracted planning information data base files..

4.5.4.9.1.1.2.2.3 Prepare Forward Unit Mission Paragraph

<u>Description</u>: Users require the capability to prepare the forward unit's mission paragraph within the friendly situation paragraph with information extracted from the mission paragraph of the forward unit's order.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.2.3.

Satisfaction Source: Extracted planning information data base files..

4.5.4.9.1.1.2.2.4 Prepare Higher-Echelon Unit Commander's Intent Paragraph

Description: Users require the capability to prepare the higher-echelon unit commander's intent

paragraph within the friendly situation paragraph with information extracted from the commander's intent paragraph

of the higher-echelon unit's order.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.2.4.

Satisfaction Source: Extracted planning information data base files.

Compile Attachments and Detachments Paragraph 4.5.4.9.1.1.2.3

Description: Users require the capability to compile the attachments and detachments paragraph

within the situation paragraph from information extracted from the task organization (found within the header or in

a separate annex) of the higher-echelon unit's order.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.2.3.

Satisfaction Source: Extracted planning information data base files.

Compile Mission Paragraph 4.5.4.9.1.1.3

Description: Users require the capability to compile the mission paragraph from information

extracted through analysis of the higher-echelon order, the command-estimate, the essential tasks list, the mission

statement, and commander's guidance.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.3.

Satisfaction Source: Restated mission data base files.

Compile Execution Paragraph 4.5.4.9.1.1.4

Description: Users require the capability to compile the execution paragraph from information

extracted through analysis of the higher-echelon order, the command-estimate, the essential tasks list, and

commander's guidance. Components are the commander's intent, concept of operation paragraph, fire support

paragraph, air defense paragraph, engineer support paragraph, NBC paragraph, and the coordinating instructions paragraph.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.4.

Satisfaction Source: Extracted planning information, friendly situation, tasks lists, and planning guidance data base files.

4.5.4.9.1.1.5 Compile Service Support Paragraph

<u>Description</u>: Users require the capability to compile the service support paragraph from information extracted through analysis of the higher-echelon order, the command-estimate, the essential tasks list, and commander's guidance. Components are the service support (general) paragraph, the material and services paragraph, and the civil-military operations paragraph.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.5.

<u>Satisfaction Source</u>: Extracted planning information, friendly situation, tasks lists, and planning guidance data base files.

4.5.4.9.1.1.6 Compile Command and Signal Paragraph

<u>Description</u>: Users require the capability to compile the command and signal paragraph from information extracted through analysis of the higher-echelon order, the command-estimate, the essential tasks list, and commander's guidance. Components are the command paragraph and the signal paragraph.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.6.

<u>Satisfaction Source</u>: Extracted planning information, friendly situation, tasks lists, and planning guidance data base files.

4.5.4.9.1.1.7 Assign Warning Order Designation

<u>Description</u>: Users require the capability to assign the warning order a unique designation sufficient for singular identification.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.1.7.

Satisfaction Source: User-defined.

4.5.4.9.1.2 Issue Warning Order

<u>Description</u>: Users require the capability to distribute the warning order to staff and subordinate elements involved in developing the plan or executing the mission.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.2.

Satisfaction Source: Orders data base files.

4.5.4.9.1.3 Store Own Warning Order

<u>Description</u>: Users require the capability to electronically store the warning order electronically for future retrieval, modification, and archival.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.3.

Satisfaction Source: Orders data base files.

4.5.4.9.1.4 Clear Warning Order Data Base

<u>Description</u>: Users require the capability to remove warning orders from electronic storage when they are no longer applicable to the planning process or current operations.

Source Document: MCS UFD, Section 3.2.1.1.4.9.1.4.

Satisfaction Source: Orders data base files.

4.5.4.9.2 Receive Subunit Warning Order Acknowledgment

<u>Description</u>: Users require the capability to receive the acknowledgment message from the recipient(s).

Source Document: MCS UFD, Section 3.2.1.1.4.9.2.

Satisfaction Source: Staff and subordinate elements.

4.5.4.10 Conduct Mission Analysis Brief

<u>Description</u>: Users require the capability to brief the mission analysis, addressing facts and assumptions, analysis of higher mission and intent, and commander's guidance.

Source Document: MCS UFD, Section 3.2.1.1.4.10.

<u>Satisfaction Source</u>: Extracted planning information, friendly and enemy situation, restrictions and constraints lists, tasks lists, facts and assumptions lists, restated mission, and planning guidance data base files.

4.5.5 Perform Intelligence Preparation of the Battlefield (IPB)

<u>Description</u>: Users require the capability to perform the IPB process, which addresses battlefield area evaluation, terrain analysis, weather analysis, threat evaluation, and threat integration. (See the Enemy Situation common function [Section 3] for a decomposition of this requirement.)

4.5.6 Develop Staff Estimates

Description: All staff elements require an automated capability to assist the commander in reaching a decision by making staff estimates in their assigned areas of responsibility. The estimate generator will assist each staff section when developing one or more estimates and analyze each staff element's capabilities and shortcomings for each COA. The estimate generator will help analyze the influences of factors within the staff officer's particular field of interest on the accomplishment of the command's mission and identify those factors that affect formulation, analysis, and comparison of feasible COAs. The estimate generator will be able to generate staff estimate briefings and estimate outlines in prescribed formats. It will accommodate the analysis and preparation of estimates such as the following: (1) the personnel estimate analyzes personnel and administration factors on soldier and unit

effectiveness as they affect accomplishment of the mission, (2) the operations estimate analyzes factors affecting the accomplishment of the mission, including analysis of relative combat power and situation, (3) the logistic estimate analyzes logistic factors affecting accomplishment of the mission, (4) the civil-military operations estimate (CMO) analyzes the influence of CMO factors on accomplishment of the mission, and (5) other staff estimates as appropriate.

Source Documents: MCS UFD, Section 3.2.1.1.6; STACCS UFD, Section 3.2.2.5; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8; AGCCS SSS, Section 3.2.1.4.5.2.4.

<u>Satisfaction Source</u>: Friendly and enemy situation, NBC information, weather information, terrain analysis, personnel resources, supplies and equipment, and civil-military operations data base files.

4.5.6.1 Analyze Relative Combat Power and Situation

<u>Description</u>: Users require a decision support capability that assists them in analyzing relative combat power and situation. The tool will assist in determining impacts of these analysis results on planned and/or ongoing operations, and translate them into command assessments. It will also help users to evaluate data on force indications and events, unit/force readiness, and operational status. The tool will identify significant data so that it can be further evaluated and linked to related events in other functional areas. Relative combat power and situation is analyzed through examination of friendly force composition, disposition, strengths and vulnerabilities, committed forces, reinforcements, supporting artillery, nuclear capability, chemical capability, air support, and force and nuclear, biological, and chemical (NBC) vulnerabilities.

Source Documents: MCS UFD, Section 3.2.1.1.6.1; STACCS UFD, Sections 3.2.2.4.1 & 3.2.2.4.1.1 & 3.2.2.4.2.2; AGCCS SSS, Section 3.2.1.4.5.2.1; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

<u>Satisfaction Source</u>: Friendly and enemy situation, terrain analysis, NBC information, weather information, and supplies and equipment data base files.

4.5.6.1.1 Analyze Own Force Composition

<u>Description</u>: Users require the capability to analyze friendly force composition through examination of type-unit components.

Source Document: MCS UFD, Section 3.2.1.1.6.1.1.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2 Analyze Own Strengths and Vulnerabilities

<u>Description</u>: Users require the capability to analyze friendly force strengths and vulnerabilities through examination of friendly force committed forces, reinforcements, supporting artillery, nuclear and chemical

capabilities, available air support, and vulnerabilities.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.2.1 Determine Friendly Committed Forces

<u>Description</u>: Users require the capability to determine committed friendly forces through

identification of those ground maneuver units currently in contact with the enemy and those ground maneuver units

for which enemy contact is imminent.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.1.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2.2 Determine Friendly Reinforcements

<u>Description</u>: Users require the capability to determine friendly reinforcements through identification of those maneuver units that are not committed but which can react to the enemy COA, subject to time and distance

considerations, to influence the accomplishment of the mission.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.2.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2.3 Determine Friendly Supporting Artillery

<u>Description</u>: Users require the capability to determine friendly supporting artillery through identification of those artillery units within range of the committed force.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.3.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2.4 Determine Friendly Nuclear Capability

<u>Description</u>: Users require the capability to determine friendly nuclear capability through identification of the number, type, yield, and delivery means of available friendly nuclear weapons.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.4.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2.5 Determine Friendly Chemical Capability

<u>Description</u>: Users require the capability to determine friendly chemical capability through identification of the number, type, yield, and delivery means of available friendly chemical weapons.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.5.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2.6 Determine Friendly Air Support

<u>Description</u>: Users require the capability to determine friendly air support through identification of the number of aircraft, by type, by number of possible sorties per day per aircraft, within operational range.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.6.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.2.7 Determine Friendly Vulnerability

<u>Description</u>: Users require the capability to determine friendly vulnerabilities through identification of friendly peculiarities and weaknesses that are exploitable by the enemy.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.7.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.2.8 Determine Friendly Force NBC Vulnerabilities

<u>Description</u>: Users require the capability to determine friendly force NBC vulnerabilities through identification of friendly peculiarities that are exploitable by enemy use of NBC weapons.

Source Document: MCS UFD, Section 3.2.1.1.6.1.3.8.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.3 Analyze Own Force Disposition

<u>Description</u>: Users require the capability to analyze friendly force disposition through examination of unit composition, organization, weapons and equipment, and location.

Source Document: MCS UFD, Section 3.2.1.1.6.1.2.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.4 Analyze Force Ratios

<u>Description</u>: Users require the capability to analyze force ratios through examination of friendly versus enemy weapons and fire support, impacts of terrain and weather, and impacts of deception, logistics, PSYOPS, and electronic warfare (EW) operations.

Source Document: MCS UFD, Sections 3.2.1.1.6.1.4 & 3.2.1.1.7.1.1.1.1.

Satisfaction Source: Friendly and enemy situation, terrain analysis, weather information, and

supplies and equipment data base files.

Analyze Friendly Weapons versus Enemy Weapons 4.5.6.1.4.1

Description: Users require the capability to analyze friendly versus enemy weapons through

examination of types, ranges, and effectiveness of weapons expected to be employed by friendly and enemy forces

in the areas of operations (AO) and interest (AI), indexed by combat value.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.1.

Satisfaction Source: Friendly and enemy situation data base files.

Analyze Friendly Fire Support versus Enemy Fire Support 4.5.6.1.4.2

Description: Users require the capability to analyze of friendly versus enemy fire support through

examination of types, ranges, and effectiveness of fire support systems expected to be employed by friendly and

enemy forces in the AO and AI, indexed by combat value.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.2.

Satisfaction Source: Friendly and enemy situation data base files.

Analyze Impacts of Deception Operations 4.5.6.1.4.3

Description: Users require the capability to analyze the impacts of deception operations on friendly

and enemy forces through comparison of friendly and enemy vulnerabilities to deception operations as evidenced

by respective dispositions, strengths, tactical doctrines, offensive and defensive capabilities, and historical precedence.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.3.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.4.4 Analyze Impacts of Terrain

<u>Description</u>: Users require the capability to analyze the impacts of terrain on friendly and enemy forces through comparison of the effects of terrain on possible COAs.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.4.

Satisfaction Source: Terrain analysis data base files.

4.5.6.1.4.5 Analyze Impacts of Weather

<u>Description</u>: Users require the capability to analyze the impacts of weather on friendly and enemy forces through comparison of the effects of weather on possible COAs.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.5.

Satisfaction Source: Weather information data base files.

4.5.6.1.4.6 Analyze Impacts of Logistics Operations

<u>Description</u>: Users require the capability to analyze the impacts of logistics operations on friendly and enemy forces through comparison of current logistics postures, requirements for logistics support, and impacts of logistics situations on possible COAs.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.6.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.1.4.7 Analyze Impacts of PSYOPS

<u>Description</u>: Users require the capability to analyze the impacts of PSYOPS on friendly and enemy forces through comparison of current troop morale and levels of experience, historical precedence, and vulnerability to PSYOPS.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.7.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.4.8 Analyze Impacts of EW Operations

<u>Description</u>: Users require the capability to analyze the impacts of EW operations on friendly and enemy forces through comparison of communications equipment, training levels, and discipline, and vulnerability to offensive C2W.

Source Document: MCS UFD, Section 3.2.1.1.6.1.4.8.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.5 Develop Friendly Order of Battle

<u>Description</u>: Users require the capability to develop the friendly order of battle through identification of friendly forces available for commitment or reinforcement in the zone of operations.

Source Document: MCS UFD, Section 3.2.1.1.6.1.5.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.6 Maintain Friendly Order of Battle

<u>Description</u>: Users require the capability to electronically store, retrieve, modify, update, and display the friendly order of battle.

Source Document: MCS UFD, Section 3.2.1.1.6.1.6.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.7 Develop Conclusions on Capabilities

<u>Description</u>: Users require the capability to develop conclusions on capabilities of friendly and enemy forces through analyses of force ratios.

Source Document: MCS UFD, Section 3.2.1.1.6.1.7.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.6.1.8 Prepare Unit Combat Readiness Report

<u>Description</u>: Users require the capability to prepare the unit combat readiness report through analysis of relative combat power and situations, force dispositions, strengths and weaknesses, force ratio comparisons, friendly order of battle, and conclusions on friendly and enemy capabilities.

Source Document: MCS UFD, Section 3.2.1.1.6.1.8.

Satisfaction Source: Friendly situation data base files.

4.5.6.1.9 Distribute Unit Combat Readiness Report

<u>Description</u>: Users require the capability to distribute the unit combat readiness report to higher headquarters and staff and subordinate elements involved in the development of the plan.

Source Document: MCS UFD, Section 3.2.1.1.6.1.9.

Satisfaction Source: Unit Combat Readiness Report data base files.

4.5.6.2 Analyze Own Personnel Situation

<u>Description</u>: Users require the capability to analyze the friendly forces personnel situation through assessment of force preparedness, determination of the feasibility of operations in terms of available personnel, and determination of the impact of operations on personnel.

Source Document: MCS UFD, Section 3.2.1.1.6.2.

Satisfaction Source: Personnel resources data base files.

4.5.6.2.1 Assess Force Preparedness

<u>Description</u>: Users require the capability to assess force preparedness through examination of unit strength data, soldier readiness, and personnel assignment and use.

Source Document: MCS UFD, Section 3.2.1.1.6.2.1.

Satisfaction Source: Personnel resources data base files.

4.5.6.2.2 Determine Feasibility of Operations (Personnel)

<u>Description</u>: Users require the capability to determine the feasibility of operations from the personnel perspective through examination of force preparedness, soldier morale, unit strength data, replacement operations, casualty operations, command climate, and the capability of personnel systems to support possible COAs.

Source Document: MCS UFD, Section 3.2.1.1.6.2.2.

Satisfaction Source: Personnel resources data base files.

4.5.6.2.3 Determine the Impacts of Operations on Personnel

<u>Description</u>: Users require the capability to determine the impacts of operations on personnel through examination of force preparedness, soldier morale, casualty forecasts, and command climate.

Source Document: MCS UFD, Section 3.2.1.1.6.2.3.

Satisfaction Source: Personnel resources data base files.

4.5.6.2.4 Prepare Personnel Situation Data for Plans

<u>Description</u>: Users require the capability to prepare personnel situation data for planning addressing force preparedness assessments, feasibility of operations, and impacts of operations on personnel.

Source Document: MCS UFD, Section 3.2.1.1.6.2.4.

Satisfaction Source: Personnel resources data base files.

4.5.6.2.5 Distribute Personnel Situation Data

<u>Description</u>: Users require the capability to distribute personnel situation data to higher headquarters, staff and subordinate elements involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.6.2.5.

Satisfaction Source: Personnel resources data base files.

4.5.6.2.6 Recommend Priority Intelligence Requirements (PIRs) for Personnel Situation Monitoring

<u>Description</u>: Users require the capability to recommend PIRs to monitor personnel situations dealing with personnel services, law and order operations, civilian control, and enemy prisoner of war (EPW) processing.

Source Document: MCS UFD, Section 3.2.1.1.6.2.6.

Satisfaction Source: User-defined.

4.5.6.3 Analyze Own Logistics Situation

<u>Description</u>: Users require the capability to analyze the friendly forces logistics situation in terms of supply, maintenance, transportation, and services. The function assists the user in conducting the logistics preparation of the battlefield, develops the mission support matrix, the reconstitution support matrix, prepares logistics situation data for planning, and develops PIRs for logistics issues.

Source Document: MCS UFD, Section 3.2.1.1.6.3.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.1 Develop Mission Support Matrix

<u>Description</u>: Users require the capability to develop the mission support matrix through examination of all logistics and personnel support actions required to sustain the force and support possible COAs.

Source Document: MCS UFD, Section 3.2.1.1.6.3.2.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.2 Develop Reconstitution Support Matrix

<u>Description</u>: Users require the capability to develop the reconstitution support matrix through examination of all logistics and personnel actions required to sustain the force through possible COAs and through forecasts of resource depletion at time of reconstitution.

Source Document: MCS UFD, Section 3.2.1.1.6.3.3.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.3 Prepare Logistics Situation Data for Plans

<u>Description</u>: Users require the capability to prepare logistics situation data for planning addressing logistics support capabilities, feasibility of operations, and impacts of operations on logistics.

Source Document: MCS UFD, Section 3.2.1.1.6.3.4.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.4 Distribute Logistics Situation Data

<u>Description</u>: Users require the capability to distribute logistics situation data to higher headquarters, staff and subordinate elements involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.6.3.5.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.5 Recommend PIRs for Logistics Issues

<u>Description</u>: Users require the capability to recommend PIRs to monitor logistics situations dealing with supply, maintenance, transportation and service operations.

Source Document: MCS UFD, Section 3.2.1.1.6.3.6.

Satisfaction Source: User-defined.

4.5.6.3.6 Conduct Logistics Preparation of the Battlefield

<u>Description</u>: Users require the capability to conduct the logistics preparation of the battlefield through analysis of logistics support capabilities, determination of the feasibility of operations, and determination of the impact of operations on logistics.

Source Document: MCS UFD, Section 3.2.1.1.6.3.1.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.6.1 Analyze Logistics Support Capabilities

<u>Description</u>: Users require the capability to analyze logistics support capabilities through examination of supply, maintenance, transportation, and services available.

Source Document: MCS UFD, Section 3.2.1.1.6.3.1.1.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.6.2 Determine Feasibility Of Operations (Logistics)

<u>Description</u>: Users require the capability to determine the feasibility of operations from the logistics perspective through examination of the capabilities of supply, maintenance, transportation, and service systems to support possible COAs.

Source Document: MCS UFD, Section 3.2.1.1.6.3.1.2.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.3.6.3 Determine the Impacts of Operations on Logistics

<u>Description</u>: Users require the capability to determine the impacts of operations on logistics through examination of supply requirements and expenditure rates, equipment readiness and maintenance workload, transportation requirements and air/surface transport control, and demands on critical services such as food and graves registration.

Source Document: MCS UFD, Section 3.2.1.1.6.3.1.3.

Satisfaction Source: Supplies and equipment data base files.

4.5.6.4 Analyze Own CMO Situation

Description: Users need a decision support capability to review the mission analysis guidance and develop the political-military analysis, considering U.S. strategic interests, characteristics, the enemy situation, the effects desired by a U.S. response, and initial employment issues. The results of this analysis will determine the dominant political-military considerations and governing factors that will affect the operation. The user analyzes the friendly forces CMO situation through assessment of situation information, influence of civil affairs, feasibility of operations, and determination of the impact of operations on the civilian populace. Civil affairs, logistics, provost marshal, and operations users also need a decision support capability to help them analyze the adequacy of civil defense organization and planning as they pertain to planned military operations. Users will be able to estimate the impacts of various planned or likely military operations on the civilian population, and then to compare available civil defense capabilities with those required for each COA or OPLAN. Users also need a means to monitor the status of emergency civil defense supplies such as food, water, medical, and sanitation supplies.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.6.4; STACCS UFD, Sections 3.2.2.4.1.2 & 3.2.2.4.4.4.1.

Satisfaction Source: CMO data base files.

4.5.6.4.1 Acquire CMO Situation Information

<u>Description</u>: Users require the capability to acquire CMO situation information through examination of the civilian impact on military operations and the political, economic, and social effects of military operations on civilian personnel.

Source Document: MCS UFD, Section 3.2.1.1.6.4.1.

Satisfaction Source: CMO data base files.

4.5.6.4.2 Analyze the Influence of CMO

<u>Description</u>: Users require the capability to analyze the influence of CMO in terms of civil affairs and civil-military relationships.

Source Document: MCS UFD, Section 3.2.1.1.6.4.2.

Satisfaction Source: CMO data base files.

4.5.6.4.3 Determine Feasibility of Operations (CMO)

<u>Description</u>: Users require the capability to determine the feasibility of operations from the civil-military perspective through examination of the civil affairs command functions, coordinating civil support for tactical and combat service support (CSS) operations to prevent civilian interference with military operations, and determining the availability and acquisition of local personnel, material, and service and economic resources.

Source Document: MCS UFD, Section 3.2.1.1.6.4.3.

Satisfaction Source: CMO data base files.

4.5.6.4.4 Determine Impact of Operations on CMO

<u>Description</u>: Users require the capability to determine the impact of operations on CMO through examination, with the Public Affairs Officer (PAO), of the effects on trends in public opinion, and effects of collateral damage to civilian personnel and property.

Source Document: MCS UFD, Section 3.2.1.1.6.4.4.

Satisfaction Source: CMO data base files.

4.5.6.4.5 Prepare CMO Situation Data for Plans

<u>Description</u>: Users require the capability to prepare CMO situation data for planning addressing influence of CMO, feasibility of operations, and impacts of operations on CMO.

Source Document: MCS UFD, Section 3.2.1.1.6.4.5.

Satisfaction Source: CMO data base files.

4.5.6.4.6 Distribute CMO Situation Data

<u>Description</u>: Users require the capability to distribute CMO situation data to higher headquarters, staff and subordinate elements involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.6.4.6.

Satisfaction Source: CMO data base files.

4.5.6.4.7 Recommend PIRs for CMO Issues

<u>Description</u>: Users require the capability to recommend PIRs to monitor CMO situations dealing with civil-military cooperation, impact of PSYOPS on the civilian population (with the G3/S3 and PAO), and trends in public opinion.

Source Document: MCS UFD, Section 3.2.1.1.6.4.7.

Satisfaction Source: User-defined.

4.5.6.5 Manage Staff Estimates

<u>Description</u>: Users require the capability to receive, display, store, print, and distribute staff estimates. They will be able to prepare and modify the staff estimates. Users also require the capability to clear staff estimate information from storage.

Source Document: MCS UFD, Section 3.2.1.1.6.5.

<u>Satisfaction Source</u>: Friendly and enemy situation, personnel resources, supplies and equipment, and CMO data base files.

4.5.6.5.1 Receive Staff Estimates

<u>Description</u>: Users require the capability to receive staff estimates from other staff sections.

Source Document: MCS UFD, Section 3.2.1.1.6.5.1.

Satisfaction Source: Other staff sections.

4.5.6.5.2 Prepare Staff Estimates

<u>Description</u>: Users require an automated capability to generate an staff estimates. They also require an automated capability to generate staff estimates that incorporate pertinent mission analysis, guidance, and regulatory, legal, and emergency authorities. The estimate generator will assist the staff user in determining the regulatory implications for a contemplated operation, including the adequacy of required legal authority, and provide a template for incorporating these considerations into all staff estimates. Regulatory and legal considerations will include U.S. laws, military regulations, STANAGS, and host nation laws.

Source Documents: MCS UFD, Section 3.2.1.1.6.5.2; STACCS UFD, Sections 3.2.2.5.1 through .5.

<u>Satisfaction Source</u>: Friendly and enemy situation, personnel resources, supplies and equipment, and CMO data base files.

4.5.6.5.3 Display Staff Estimates

Description: Users require the capability to display staff estimates in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.6.5.3.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.4 Store Staff Estimates

<u>Description</u>: Users require the capability to store staff estimates.

Source Document: MCS UFD, Section 3.2.1.1.6.5.4.

Satisfaction Source: Friendly and enemy situation, personnel resources, supplies and equipment, and CMO data base files.

4.5.6.5.5 Search Staff Estimates

<u>Description</u>: Users require the capability to search the data base for staff estimates.

Source Document: MCS UFD, Section 3.2.1.1.6.5.5.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.6 Retrieve Staff Estimates

<u>Description</u>: Users require the capability to retrieve staff estimates from storage.

Source Document: MCS UFD, Section 3.2.1.1.6.5.6.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.7 Modify Staff Estimates

<u>Description</u>: Users require the capability to modify staff estimates.

Source Document: MCS UFD, Section 3.2.1.1.6.5.7.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.8 Distribute Staff Estimates

<u>Description</u>: Users require the capability to distribute staff estimates.

Source Document: MCS UFD, Section 3.2.1.1.6.5.8.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.9 Delete Staff Estimates

<u>Description</u>: Users require the capability to delete user-selected staff estimates from storage.

Source Document: MCS UFD, Section 3.2.1.1.6.5.9.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.10 Print Staff Estimates

<u>Description</u>: Users require the capability to print staff estimates.

Source Document: MCS UFD, Section 3.2.1.1.6.5.10.

Satisfaction Source: Staff estimates data base files.

4.5.6.5.11 Clear Staff Estimates Data Base

<u>Description</u>: Users require the capability to clear staff estimate information from storage.

Source Document: MCS UFD, Section 3.2.1.1.6.5.11.

Satisfaction Source: Staff estimates data base files.

4.5.7 Develop COAs

<u>Description</u>: Users require a decision support capability to help them create one or more COAs in a "no plan" situation, or one where an insufficient number of approved, appropriate COAs exist. The commander and G3/S3, with input from the staff, develop and coordinate COAs, and prepare COA statements and sketches. The commander approves COAs before further action is taken.

Source Documents: MCS UFD, Section 3.2.1.1.7; STACCS UFD, Section 3.2.2.4.3; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8; AGCCS SSS, Section 3.2.1.4.5.2.2.

Satisfaction Source: Friendly and enemy situation and other data bases files.

4.5.7.1 Review OPLAN and CONPLAN for COA

<u>Description</u>: Users require a capability to compare the planning directive with existing approved OPLANs/CONPLANs and initial estimates. If one or more COAs are found that can be modified or expanded to suit the mission, the tool will aid staffs in changing them as necessary, and importing them to other applications.

Source Document: STACCS UFD, Section 3.2.2.4.2.1.

Satisfaction Source: Plans data base files.

4.5.7.2 Develop Courses of Action

<u>Description</u>: Users require a capability to create a folder for each COA. The folder will contain all information generated for the COA. The staff analyzes the present situation, develops a scheme of maneuver, and incorporates command and control measures for each COA.

Source Documents: MCS UFD, Sections 3.2.1.1.7.1 & 3.2.1.1.7.1.1; STACCS UFD, Section 3.2.2.4.3.1.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.1 Analyze the Present Situation

<u>Description</u>: Users require the capability to analyze relative force ratios, deep, close, rear operations, and initial array of forces, and prepares and distributes tactical situation analysis data.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.1.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.1.1 Analyze Deep Operations

<u>Description</u>: Users require the capability to analyze deep operations through information acquisition and analysis of deep maneuver, fire support, and command, control, and communications countermeasures (C3CM) operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.1.2.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.1.1 Acquire Information for Deep Operations Analysis

<u>Description</u>: Users require the capability to acquire information for deep operations analysis.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.1.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.1.2 Analyze Deep Maneuver Operations

<u>Description</u>: Users require the capability to analyze deep maneuver operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.1.2.2.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.1.3 Analyze Deep Fire Support Operations

<u>Description</u>: Users require the capability to analyze deep fire support operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.3.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.1.4 Analyze Deep C3CM Operations

<u>Description</u>: Users require the capability to analyze deep C3CM operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.4.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.2 Analyze Close Operations

<u>Description</u>: Users require the capability to analyze close operations through information acquisition, and analysis of close operations engagements, and combat and CSS requirements.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.1.3.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.2.1 Acquire Information for Close Operations Analysis

<u>Description</u>: Users require the capability to acquire information for close operations analysis.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.1.

4.5.7.2.1.2.2 Analyze Close Operations Engagements

<u>Description</u>: Users require the capability to analyze close operations engagements.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.2.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.2.3 Analyze Close Operations Combat Requirements

<u>Description</u>: Users require the capability to analyze close operations combat requirements.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.3.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.2.4 Analyze Close Operations CSS Requirements

<u>Description</u>: Users require the capability to analyze close operations CSS requirements.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.4.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.3 Analyze Rear Operations

<u>Description</u>: Users require the capability to analyze rear operations through information acquisition and analysis of Level I, II, and III Threats.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.4.

4.5.7.2.1.3.1 Acquire Information for Rear Area Operations Analysis

Description: Users require the capability to acquire information for rear area operations analysis.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.4.1.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.3.2 Analyze Level I Threat

<u>Description</u>: Users require the capability to analyze the Level I Threat.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.4.2.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.3.3 Analyze Level II Threat

<u>Description</u>: Users require the capability to analyze the Level II Threat.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.1.4.3.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.3.4 Analyze Level III Threat

<u>Description</u>: Users require the capability to analyze the Level III Threat.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.4.4.

4.5.7.2.1.4 Analyze Initial Array of Forces

<u>Description</u>: Users require the capability to analyze the initial array of forces and determines feasible operations and the proposed forward edge of the battle area (FEBA).

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.5.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.4.1 Determine Feasible Operations

<u>Description</u>: Users require the capability to determine feasible operations through analysis of the present situation, relative force ratios, deep, close, rear, security and reserve operations, and probable enemy COAs.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.5.1.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.4.2 Determine the Proposed FEBA

<u>Description</u>: Users require the capability to determine the proposed FEBA through analysis of feasible operations, terrain analysis, and disposition of friendly and enemy forces.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.5.2.

Satisfaction Source: Friendly and enemy situation data base files.

4.5.7.2.1.5 Prepare Tactical Situation Analysis Data

<u>Description</u>: Users require the capability to prepare tactical situation analysis data.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.6.

4.5.7.2.1.6 Distribute Tactical Situation Analysis Data

<u>Description</u>: Users require the capability to distribute tactical situation analysis data to higher headquarters, staff and subordinate elements involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.1.7.

Satisfaction Source: Tactical Situation Analysis Data base files.

4.5.7.2.2 Develop the Scheme of Maneuver

<u>Description</u>: Users require the capability to develop the scheme of maneuver through analysis of deep, close, rear, security, and reserve operations. Consideration is given to the current NBC warfare situation, possible and probable NBC employment, probable enemy COAs, deception, force requirements, and special operations forces (SOF) and PSYOPS employment.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.1 Address Deep Operations

<u>Description</u>: Users require the capability to address deep operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.1.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.2 Address Close Operations

<u>Description</u>: Users require the capability to address close operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.2.

4.5.7.2.2.3 Address Rear Operations

<u>Description</u>: Users require the capability to address rear operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.3.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.4 Address Security Operations

<u>Description</u>: Users require the capability to address security operations. Users require a decision support capability that enables them to develop COAs that protect operational flanks, and that consider all necessary measures to prevent the enemy from detecting, observing, surprising, or interfering with operational forces. It will also assist them in planning methods of varying activities and ways of conducting operations to avoid predictable patterns that are vulnerable to enemy detection and interpretation.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.7.1.1.2.4; STACCS UFD, Sections 3.2.2.4.1.4 & 3.2.2.4.1.5.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.5 Address Reserve Operations

<u>Description</u>: Users require the capability to address reserve operations.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.5.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.6 Address NBC Operations

<u>Description</u>: Users require the capability to address NBC operations including possible and probable employment of NBC weapons.

Source Document: MCS UFD, Sections 3.2.1.1.7.1.1.2.6 & 3.2.1.1.7.1.1.2.7.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.7 Determine Force Requirements for COA

Description: Users need a capability to generate a force structure to accomplish the assigned

mission for each COA. The tool will help develop an initial list of combat forces to meet the enemy threat. Then,

depending on the COA being considered, and when interfaced with an automated wargaming capability, it will

provide a capability to do a force-on-force conflict simulation of each proposed friendly COA, progressing to some

logical termination. The simulation results provide a time-phased requirement for major forces over the time-span

of the COA.

Source Document: STACCS UFD, Section 3.2.2.4.8.

Satisfaction Source: Friendly and enemy situation and other data base files.

Analyze Force Requirements vs Capabilities 4.5.7.2.2.7.1

Description: Users require an automated decision support capability to assist in determining the

variance between combat, combat support (CS), and CSS forces ready and allocated to specific OPLANs/OPORDs,

and the current force allocations provided in JCSP, warning/alert orders, or other taskings.

Source Document: STACCS UFD, Section 3.2.2.4.8.1.

Satisfaction Source: Friendly and enemy situation and other data base files.

Determine Combat Force Requirements 4.5.7.2.2.7.2

Description: Users require a decision support capability to help them generate a force structure

to accomplish the assigned mission. It will develop an initial list of combat forces to meet the enemy order of battle;

then, depending upon the COA under consideration, the tool will provide an interface with an automated wargaming

capability to support a force-on-force conflict simulation of each proposed friendly COA, progressing to some logical

termination. The results of this simulation provide a time-phased requirement for major combat forces over the time

span of the COA.

Source Document: STACCS UFD, Section 3.2.2.4.8.2.

4-106

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.7.3 Determine CS Force Requirements

<u>Description</u>: Users require a decision support capability that calculates CS requirements for each proposed COA. As part of this analysis, priority lists for each support asset are developed. The tool will also determine the probable cost of executing each COA in terms of CS losses. The tool will consider service doctrine and/or projected employment planning factors in generating the required support forces.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.7.4.4.3.8; STACCS UFD, Sections 3.2.2.4.8.3, 3.2.2.4.9, 3.2.2.4.9.3 & 3.2.2.4.9.3.1 through .5.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.7.4 Determine CSS Force Requirements

Description: Users require a decision support capability that assists them in developing CSS force requirements for each COA by using planning factors, combat and CS force requirements, force modules, and force tailoring coordination. As part of this analysis, priority lists for each support asset are developed. The application will consider, as inputs to the decision process, existing shelf requisitions, predicted casualty rates, and prepositioned replacements available to satisfy identified requirements. The tool will integrate the commander's priorities, other established priorities, and the evolving operational and tactical situations, with COA requirements to help determine the optimum allocation of personnel by number and skill. The tool will calculate logistics requirements for all classes of supply for each proposed COA, based on predetermined consumption rates for each unit type for the expected intensity of combat, the mission, and the nature of the environment. The probable cost of executing each COA is also determined with regard to general supply losses.

Source Documents: MCS UFD, Section 3.2.1.1.7.4.4.3.9; STACCS UFD, Sections 3.2.2.4.8.4, 3.2.2.4.9, 3.2.2.4.9.1, 3.2.2.4.9.1, 3.2.2.4.9.2, 3.2.2.4.9.4 & 3.2.2.4.9.4.1 through .3.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.8 Address Probable Enemy COAs

<u>Description</u>: Users require the capability to address probable enemy COAs.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.2.8.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.9 Develop the Deception Story

<u>Description</u>: Users require the capability to develop the deception story for the COA. Users require a decision support capability that allows them to develop COAs that will prevent the enemy from learning the true intent of the commander's operations and deception plans. The tool will help planners consider and implement actions that will limit, until the last possible moment, the number of people aware of friendly plans; delay or mask operational movements and preparations; deceive friendly leaders and soldiers where necessary; and other appropriate actions.

Source Document: C&GSC ST 100-9, Section 4-3, Step 2a; STACCS UFD, Section 3.2.2.4.1.3.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.10 Determine Tasks

<u>Description</u>: Users require the capability to determine the tasks that will accomplish the stated purpose for the main and supporting efforts.

Source Document: C&GSC ST 100-9, Section 4-3, Step 2d.

Satisfaction Source: Friendly situation and other data base files.

4.5.7.2.2.11 Array Main and Supporting Efforts

<u>Description</u>: Users require the capability to array the main and the supporting efforts' forces two levels down on the planning map, using generic maneuver units without regard to type.

Source Document: C&GSC ST 100-9, Section 4-3, Step 2e.

Satisfaction Source: Friendly situation and other data base files.

4.5.7.2.2.12 Group Forces into Sub-Elements

<u>Description</u>: Users require the capability to group forces into logical elements (e.g., battalions are grouped into brigades.)

Source Document: C&GSC ST 100-9, Section 4-3, Step 2f.

Satisfaction Source: Friendly situation and other data base files.

4.5.7.2.2.13 Address SOF Employment

<u>Description</u>: Users require a decision support capability that assists in developing COAs that include the use of SOF. Such forces may be employed to influence the accomplishment of operational objectives through the conduct of low visibility, covert, or clandestine military operations directed against enemy operational and tactical forces. The tool will support analysis and development of COAs for conduct and support of conventional operations, unconventional warfare, counterterrorist operations, collective security, certain rescue operations, reconnaissance and surveillance, and will assist in integrating these operations closely with the operational plan.

Source Document: STACCS UFD, Section 3.2.2.4.4.5.

Satisfaction Source: Friendly and enemy situation and other data base files.

4.5.7.2.2.14 Address PSYOPS Employment

<u>Description</u>: Users require a decision support capability that assists in determining how to best employ PSYOPS forces and means to disrupt cohesion of enemy forces, to degrade the effectiveness of enemy human performance, and to reduce the enemy's will to continue the fight. The tool will include COA analysis for the use of propaganda directed against civilian populations and enemy soldiers to promote favorable attitudes toward friendly forces and objectives, as well as actions to reduce the effectiveness of enemy PSYOPS directed against friendly troops and civilians.

Source Document: STACCS UFD, Section 3.2.2.4.4.6 & 3.2.2.4.4.6.1 through .7.

4.5.7.2.3 Incorporate Control Measures

<u>Description</u>: Users require the capability to incorporate control measures in the form of C2 measures, maneuver control measures, and fire support control measures. The control measures include map graphics and task organization information.

Source Document: MCS UFD, Sections 3.2.1.1.7.1.1.3 & 3.2.1.1.7.1.1.4.

Satisfaction Source: User-defined.

4.5.7.2.3.1 Incorporate Maneuver Control Measures

<u>Description</u>: Users require the capability to develop and incorporate maneuver control measures to assist in control of forces on the battlefield, through the use of map graphics. Among these are unit boundaries, phase lines, battle positions, objectives, axes of attack, supply routes, coordination points, and limits of advance.

Source Document: MCS UFD, Sections 3.2.1.1.7.1.1.3.2 & 3.2.1.1.8.3.2.

Satisfaction Source: User-defined.

4.5.7.2.3.2 Incorporate Fire Support Control Measures

<u>Description</u>: Users require the capability to develop and incorporate direct and indirect fire control measures through the use of map graphics and fire support information.

Source Document: MCS UFD, Sections 3.2.1.1.7.1.1.3.3 & 3.2.1.1.8.3.1.

Satisfaction Source: User-defined.

4.5.7.2.3.3 Incorporate C2 Control Measures

<u>Description</u>: Users require the capability to incorporate C2 control measures into the operation plan.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.1.

Satisfaction Source: User-defined.

4.5.7.2.3.3.1 Determine Systems and Means of C2

<u>Description</u>: Users require the capability to determine systems and means by which to implement

C2 of the force.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.1.1.

Satisfaction Source: User-defined.

4.5.7.2.3.3.2 Allocate Subordinate HQ Unit Control

Description: Users require the capability to allocate subordinate units to subordinate headquarters for control. Users require a decision support capability to assist in assigning actual units, to the maximum extent feasible, to satisfy the combat, CS, and CSS force requirements of each COA under consideration. The user will have the capability of starting the COA at any time within the next 60 days for a duration of 10 days. The COA will consider the expenditure and receipt of resources during sustainment operations from the current date to the commencement date of the COA. The application will be able to automatically increment or decrement theater army

resources over time as required prior to evaluating the COA.

Source Documents: MCS UFD, Section 3.2.1.1.7.1.1.3.1.2; STACCS UFD, Section 3.2.2.4.10.

Satisfaction Source: User-defined.

4.5.7.3 Prepare COA Statements and Sketches

<u>Description</u>: Users require the capability to prepare a statement and a sketch describing each COA.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.

Satisfaction Source: COA data base files.

4.5.7.3.1 Prepare COA Statement

<u>Description</u>: Users require the capability to prepare a statement describing the COA, including the purpose of the operation, the main effort, the scheme of maneuver, the supporting effort, Army operations imperatives, use of NBC weapons and defense measures. The statement is maintained and updated or archived as necessary.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.

Satisfaction Source: COA data base files.

4.5.7.3.1.1 Prepare COA Purpose of the Operation

<u>Description</u>: Users require the capability to prepare a statement describing the purpose of the operation for incorporation into the COA statement.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.1.

Satisfaction Source: COA data base files.

4.5.7.3.1.2 Prepare COA Force's Main Effort

<u>Description</u>: Users require the capability to prepare a statement describing the force main effort and its actions for incorporation into the COA statement.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.2.

Satisfaction Source: COA data base files.

4.5.7.3.1.3 Prepare COA Scheme of Maneuver

<u>Description</u>: Users require the capability to prepare a statement describing the operation scheme of maneuver for incorporation into the COA statement.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.3.

Satisfaction Source: COA data base files.

4.5.7.3.1.4 Prepare COA Supporting Effort

<u>Description</u>: Users require the capability to prepare a statement describing the force supporting effort for incorporation into the COA statement.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.4.

Satisfaction Source: COA data base files.

4.5.7.3.1.5 Prepare COA Army Operations Imperatives

<u>Description</u>: Users require the capability to prepare a statement describing how the Army operations imperatives that define mission accomplishment will be met for incorporation into the COA statement.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.5.

Satisfaction Source: COA data base files.

4.5.7.3.1.6 Prepare COA NBC Usage

<u>Description</u>: Users require the capability to prepare a statement describing the use of NBC weapons and defense measures for incorporation into the COA statement.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.6.

Satisfaction Source: COA data base files.

4.5.7.3.1.7 Maintain COA Statement

<u>Description</u>: Users require the capability to electronically store, retrieve, modify, update, and archive the COA statement, as necessary.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.1.7.

Satisfaction Source: COA data base files.

4.5.7.3.2 Prepare COA Sketch

<u>Description</u>: Users require the capability to prepare a sketch describing the COA depicting objectives, main effort, engagement areas (EAs), battle positions (BPs), assembly areas (AAs), axes of advance and attack, control measures, coordination lines, phase lines, and actual and templated enemy positions.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.

Satisfaction Source: COA data base files.

4.5.7.3.2.1 Depict Objectives and the Main Effort

<u>Description</u>: Users require the capability to depict objectives and the force main effort using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.1.

Satisfaction Source: COA data base files.

4.5.7.3.2.2 Depict EAs and BPs

Description: Users require the capability to depict EAs and BPs using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.2.

Satisfaction Source: COA data base files.

4.5.7.3.2.3 Depict AAs

Description: Users require the capability to depict AAs using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.3.

Satisfaction Source: COA data base files.

4.5.7.3.2.4 Depict Axes of Advance and Attack

<u>Description</u>: Users require the capability to depict axes of advance and attack using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.4.

Satisfaction Source: COA data base files.

4.5.7.3.2.5 Depict Control Measures

<u>Description</u>: Users require the capability to depict control measures using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.5.

Satisfaction Source: COA data base files.

4.5.7.3.2.6 Depict Coordination Lines

<u>Description</u>: Users require the capability to depict coordination lines using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.6.

Satisfaction Source: COA data base files.

4.5.7.3.2.7 Depict Phase Lines

<u>Description</u>: Users require the capability to depict phase lines using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.7.

Satisfaction Source: COA data base files.

4.5.7.3.2.8 Depict Enemy Templates

Description: Users require the capability to depict enemy templates using map graphics.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.8.

Satisfaction Source: COA data base files.

4.5.7.3.2.9 Maintain COA Sketch

<u>Description</u>: Users require the capability to electronically store, retrieve, modify, update, and distribute the COA sketch.

Source Document: MCS UFD, Section 3.2.1.1.7.1.2.2.9.

Satisfaction Source: COA data base files.

4.5.7.4 Obtain the Commander's Approval of COAs

<u>Description</u>: Users require the capability to briefs the COAs to the commander and obtain his approval.

Source Document: MCS UFD, Section 3.2.1.1.7.1.3.

Satisfaction Source: COA data base files.

4.5.8 Analyze and Compare COAs

Description: Users require a decision support tool that will help them decide on the COA that offers the best prospect for success. The tool will also enable users to modify a COA previously selected. It will allow users to analyze the results of COA wargaming, the staff estimates, and the commander's guidance, and use these to complete the evaluation of each COA and place proposed COAs, in prioritized order. The results are used to obtain the commander's decision on which COA is best suited to accomplishing the specific mission. The staff analyzes the COAs and BOS assessments through mapping of the area of operations and the area of interest; lists friendly forces, mission assumptions, critical events, decision points and significant factors; and performs war

gaming. Consideration is given to map data, the target areas of interest (TAI) list, the named areas of interest (NAI) list, attrition rates, combat multipliers list, unit task organization, commander's sustainment priorities, list of commander's critical information requirements, COA advantages and disadvantages, and decision factors. The tool will exchange information with the staff estimate generator to support development of the operations estimate.

Source Documents: MCS UFD, Section 3.2.1.1.7.4; STACCS UFD, Sections 3.2.2.4.4 & 3.2.2.4.7.1.

Satisfaction Source: COA data base files.

4.5.8.1 List Critical Events

<u>Description</u>: Users require the capability to display, store, and print critical events lists. They also require the capability to prepare and modify critical events lists. Users require the capability to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: COA data base files.

4.5.8.1.1 Prepare Critical Events List

<u>Description</u>: Users require the capability to prepare critical events lists.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: COA data base files.

4.5.8.1.2 Display Critical Events List

Description: Users require the capability to display critical events lists in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: Critical events list data base files.

4.5.8.1.3 Store Critical Events List

<u>Description</u>: Users require the capability to store critical events lists for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: COA data base files.

4.5.8.1.4 Search Critical Events List

<u>Description</u>: Users require the capability to search the data base for events lists.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: Critical events list data base files.

4.5.8.1.5 Retrieve Critical Events List

<u>Description</u>: Users require the capability to retrieve critical events lists from the data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: Critical events list data base files.

4.5.8.1.6 Modify Critical Events List

<u>Description</u>: Users require the capability to amend the critical events list by editing existing critical events or appending new critical events.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: COA and critical events list data base files.

4.5.8.1.7 Delete Critical Events List

<u>Description</u>: Users require the capability to remove the critical events list from the data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: Critical events list data base files.

4.5.8.1.8 Print Critical Events List

<u>Description</u>: Users require the capability to print critical events lists.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: Critical events list data base files.

4.5.8.1.9 Clear Critical Events Lists From Data Base

<u>Description</u>: Users require the capability to clear all critical events list from memory.

Source Document: MCS UFD, Section 3.2.1.1.7.4.1.

Satisfaction Source: Critical events list data base files.

4.5.8.2 List Decision Points

<u>Description</u>: Users require the capability to display, store, and print decision points lists. They also require the capability to prepare and modify decision points lists. Users require the capability to clear the commander's priorities from the data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.

Satisfaction Source: COA data base files.

4.5.8.2.1 Prepare Decision Points List

<u>Description</u>: Users require the capability to prepare decision points lists.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.1.

Satisfaction Source: COA data base files.

4.5.8.2.2 Display Decision Points List

Description: Users require the capability to display decision points lists in a usable format.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.2.

Satisfaction Source: Decision points data base files.

4.5.8.2.3 Store Decision Points List

<u>Description</u>: Users require the capability to store decision point lists for future retrieval, manipulation, and archival.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.3.

Satisfaction Source: COA data base files.

4.5.8.2.4 Search Decision Points List

Description: Users require the capability to search the data base for decision lists.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.4.

Satisfaction Source: Decision points data base files.

4.5.8.2.5 Retrieve Decision Points List

<u>Description</u>: Users require the capability to retrieve decision points lists from the data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.5.

Satisfaction Source: Decision points data base files.

4.5.8.2.6 Modify Decision Points List

<u>Description</u>: Users require the capability to amend the decision points list by editing existing decision points or appending new decision points.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.6.

Satisfaction Source: COA and decision points data base files.

4.5.8.2.7 Delete Decision Points List

Description: Users require the capability to remove the decision points list from the data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.7.

Satisfaction Source: Decision points data base files.

4.5.8.2.8 Print Decision Points List

<u>Description</u>: Users require the capability to print decision points lists.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.8.

Satisfaction Source: Decision points data base files.

4.5.8.2.9 Clear Decision Points Lists From Data Base

<u>Description</u>: Users require the capability to clear all decision points lists from memory.

Source Document: MCS UFD, Section 3.2.1.1.7.4.2.9.

Satisfaction Source: Decision points data base files.

4.5.8.3 List Significant Factors

<u>Description</u>: Users require the capability to list significant factors affecting the mission, to include those pertaining to terrain, weather, known enemy activities, mission time phasing, force status, future operations, NBC employment, and force sustainment.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.

Satisfaction Source: Terrain analysis, weather information, enemy situation, COA, friendly situation, NBC information, and supplies and equipment data base files.

4.5.8.3.1 List Terrain Factors

<u>Description</u>: Users require the capability to list terrain factors affecting the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.1.

Satisfaction Source: Terrain analysis data base files.

4.5.8.3.2 List Weather Factors

<u>Description</u>: Users require the capability to list weather factors affecting the mission. The NBC staff officer also requires a capability to access weather and terrain data bases and query them for data to model forecasted weather conditions in complex terrain for COA analysis, vulnerability assessments, smoke planning, hazard predictions, target analysis, and fire planning.

Source Documents: MCS UFD, Section 3.2.1.1.7.4.3.2; STACCS UFD, Section 3.2.2.4.4.2.

Satisfaction Source: Weather information data base files.

4.5.8.3.3 List Known Enemy Activity Factors

<u>Description</u>: Users require the capability to list known enemy activity factors affecting the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.3.

Satisfaction Source: Enemy situation data base files.

4.5.8.3.4 List Mission Time-Phasing Factors

<u>Description</u>: Users require the capability to list mission time-phasing factors affecting the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.4.

Satisfaction Source: COA data base files.

4.5.8.3.5 List Force Status Factors

Description: Users require the capability to list force status factors affecting the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.5.

Satisfaction Source: Friendly situation data base files.

4.5.8.3.6 List Future Operations Factors

<u>Description</u>: Users require the capability to list future operations factors affecting the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.6.

Satisfaction Source: COA data base files.

4.5.8.3.7 List NBC Employment Factors

<u>Description</u>: Users require the capability to evaluate COAs to identify optimal positioning and employment of NBC assets/resources, and balance these assets/resources in concert with the commander's guidance. It will allow the user to evaluate selected COAs to assist in reducing the amount of time necessary to prepare recommendations and make decisions concerning the allocation of NBC assets.

Source Documents: MCS UFD, Section 3.2.1.1.7.4.3.7; STACCS UFD, Section 3.2.2.4.4.3.

Satisfaction Source: NBC information data base files.

4.5.8.3.8 List Force Sustainment Factors

Description: Users require the capability to list force sustainment factors affecting the mission.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.8.

Satisfaction Source: Supplies and equipment data base files.

4.5.8.3.9 Maintain Factors List

<u>Description</u>: Users require the capability to electronically store, retrieve, modify, update, and distribute the factors list, as necessary.

Source Document: MCS UFD, Section 3.2.1.1.7.4.3.9.

Satisfaction Source: Factors list data base files.

4.5.8.4 Perform War Gaming

Description: Users require a decision support capability that assists in evaluating each proposed COA, as if opposed by each enemy capability, as developed in the intelligence estimate, and that assists in determining the governing factors inherent to each COA. This capability will help users examine staff estimates and the planning directive to wargame each proposed COA. These wargames determine if the proposed mix of combat and support forces is suitable and feasible, and if each proposed COA is acceptable and complete. Wargames also

determine whether the variety of COAs is sufficient to provide real choices. The tool will interface with an automated wargaming capability. The G3/S3 leads the staff through the war gaming process of each COA. A method of war gaming is selected and results are recorded and analyzed. Consideration is given to attrition rates, CSS requirements, decision points information, combat multipliers, combat support requirements, critical events information, NAIs and TAIs, COA advantages and disadvantages, and the commander's critical information requirements.

Source Documents: MCS UFD, Section 3.2.1.1.7.4.4; STACCS UFD, Sections 3.2.2.4.4.1 & 3.2.2.4.6.

Satisfaction Source: COA data base files.

4.5.8.4.1 Select the Method of War Gaming

<u>Description</u>: Users require the capability to select the war gaming method most appropriate for the COAs to be analyzed. Among the more common methods are the belt technique, the avenue-in-depth technique, the box technique, and the adversarial technique.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.

Satisfaction Source: COA data base files.

4.5.8.4.1.1 Select Avenue-in-Depth Technique

<u>Description</u>: Users require the capability to select the avenue-in-depth technique when analysis of one avenue of approach at a time is required, beginning with the main effort. The technique is most appropriate for friendly offensive operations or when terrain canalizes an attacking enemy.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.3.

Satisfaction Source: COA data base files.

4.5.8.4.1.2 Select Belt Technique

<u>Description</u>: Users require the capability to select the belt technique when sequential analysis of subcomponent battles is required. The staff war games initial contact along the FEBA and/or forward line of own troops (FLOT), passage of reserves, counterattacks, and force exploitation and pursuit. The commander determines the exact shape of the belt based on battlefield analysis. In the offense, the phases of assault and penetration, exploitation, and pursuit, will be considered. In the defense, the commander and staff will examine the battle in the covering force area (CFA), in the MBA, and in the rear area.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.

Satisfaction Source: COA data base files.

4.5.8.4.1.2.1 War Game Initial Contact (FEBA)

<u>Description</u>: Users require the capability to war game initial contact along the FEBA.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.1.

Satisfaction Source: COA data base files.

4.5.8.4.1.2.2 War Game Passage of Reserves

Description: Users require the capability to war game forward passage of reserve forces.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.2.

Satisfaction Source: COA data base files.

4.5.8.4.1.2.3 War Game Counterattack

Description: Users require the capability to war game counterattack options.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.3.

Satisfaction Source: COA data base files.

4.5.8.4.1.2.4 War Game Force Exploitation

<u>Description</u>: Users require the capability to war game force exploitation opportunities.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.4.

Satisfaction Source: COA data base files.

4.5.8.4.1.2.5 War Game Force Pursuit

<u>Description</u>: Users require the capability to war game force pursuit options.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.5.

Satisfaction Source: COA data base files.

4.5.8.4.1.2.6 War Game Initial Contact (FLOT)

<u>Description</u>: Users require the capability to war game initial contact along the FLOT.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.2.6.

Satisfaction Source: COA data base files.

4.5.8.4.1.3 Select Box Technique

<u>Description</u>: Users require the capability to select the box technique when microanalysis of a critical area is required, such as when the task is apparent, or when time is limited. The commander isolates the area and focuses the battle there, making an initial assumption that friendly units can handle most of the remaining battlefield.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.4.

Satisfaction Source: COA data base files.

Select Adversarial Technique 4.5.8.4.1.4

Description: Users require the capability to select the adversarial technique when accurate

predictions of the enemy commander's actions and reactions can be made. The G2/S2 plays the role of opposing

force commander and the staff uses any of the three war gaming techniques (belt, avenue-in-depth, box) to war game

each COA against his arguments.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.5.

Satisfaction Source: COA data base files.

Conduct and Record War Gaming Results 4.5.8.4.2

Description: Once the war gaming method is selected, users require the capability to select and

war game each COA in turn. War gaming results are electronically recorded and displayed, facilitating analysis from

which to build task organization, synchronize activities through coordination, develop decision support templates,

and prepare plans and orders. The action is portrayed using the narrative, sketch note, or synchronization matrix

technique.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.

Satisfaction Source: COA data base files.

4.5.8.4.2.1 Select the COA to be War Gamed

Description: Users require the capability to select and war game each COA.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.1.1.

Satisfaction Source: COA data base files.

4.5.8.4.2.2 Record Results Using Narrative

<u>Description</u>: Users require the capability to record the war gaming results in narrative form, describing the visualization of the operation in sequence.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.1.

Satisfaction Source: COA data base files.

4.5.8.4.2.3 Display Results of Narrative

<u>Description</u>: Users require the capability to electronically display the war gaming results in narrative (text) form, sufficient for development of plans and preparation for execution.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.2.

Satisfaction Source: COA data base files.

4.5.8.4.2.4 Record Results Using Sketch-Notes

<u>Description</u>: Users require the capability to record the war gaming results in sketch-note form, referencing critical locations or tasks linked to specific locations on the map or relating to general considerations. Sketch-notes are recorded on the map, on a separate war game worksheet, or on a synchronization matrix. Sequence numbers are used to reference notes to locations on the map.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.3.

Satisfaction Source: COA data base files.

4.5.8.4.2.5 Display Results of Sketch-Notes

<u>Description</u>: Users require the capability to electronically display the war gaming results in sketchnote form, linked to the map, war game worksheet, or synchronization matrix, sufficient for development of plans and preparation for execution. Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.4.

Satisfaction Source: COA data base files.

Record Results Using Synchronization Matrix 4.5.8.4.2.6

Description: Users require the capability to record the war gaming results on a synchronization

matrix showing time, space, and purpose in relation to the most likely enemy COA.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.5.

Satisfaction Source: COA data base files.

Display Results of Synchronization Matrix 4.5.8.4.2.7

Description: Users require the capability to electronically display the war gaming results are in

synchronization matrix form, sufficient for development of plans and preparation for execution.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.2.6.

Satisfaction Source: COA data base files.

Analyze War Gaming Results 4.5.8.4.3

Description: Users require the capability to analyze war gaming results through inspection of

attrition rates, CSS requirements, decision point information, combat multipliers, critical events information, NAIs

and TAIs, COA advantages and disadvantages, and the CCIRs. COAs are modified or refined as necessary,

advantages and disadvantages are summarized, possible COA options and branches are evaluated, and operation

phasing is determined. CCIRs are projected into future operations.

Source Documents: MCS UFD, Section 3.2.1.1.7.4.4.3; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: War gaming results data base files.

4-130

4.5.8.4.3.1 Modify or Refine COA

<u>Description</u>: Users require the capability to modify or refine COAs, as necessary, as a result of the war gaming process. The composition of main, secondary, and required reserve forces are validated. Locations of forces are finalized. Control measures, including unit boundaries, objectives, engagement areas, phase lines, and fire support coordinating measures are adjusted as necessary.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.1.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.2 Summarize COA Advantages

<u>Description</u>: Users require the capability to summarize COA advantages to facilitate comparison.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.2.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.3 Summarize COA Disadvantages

<u>Description</u>: Users require the capability to summarize COA disadvantages to facilitate comparison.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.3.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.4 Identify/Verify NAIs and TAIs

<u>Description</u>: Users require the capability to identify and verify NAIs and TAIs for each COA. These NAIs and TAIs are tied to future events and high-value targets.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.4.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.5 Verify/ Identify Critical Events

Description: Users require the capability to identify and verify critical events for each COA.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.5.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.6 Verify/ Identify Decision Points

Description: Users require the capability to identify and verify decision points for each COA.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.6.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.7 Determine Combat Multipliers

<u>Description</u>: Users require the capability to determine combat multipliers determined for each COA. considers all that might enhance the unit's relative combat strength. Among these are CSS, deception, EW support, PSYOPS, scatterable mines, military police, and smoke.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.7.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.8 Determine Expected Attrition Rates

<u>Description</u>: Users require the capability to determine expected rates of attrition for each COA. Risk of potential personnel battle losses are articulated in terms of low, acceptable, or high. Comparison between COAs are specified in terms of less, more, or equally at risk.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.10.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.9 Identify Possible COA Options

<u>Description</u>: Users require the capability to identify possible options for each COA. NAIs and TAIs are used to identify likely decision points presenting execution options.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.11.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.10 Identify Possible COA Branches

<u>Description</u>: Users require the capability to identify possible COA branches as war gaming identifies possible enemy reactions for each friendly action. These branches are developed as necessary for inclusion in the OPLAN or OPORD.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.12.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.11 Determine Operations Phasing

<u>Description</u>: Users require the capability to determine operations phasing for each COA as specific requirements which the force will meet by certain times are identified. Operations phasing is primarily used in offensive operations.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.13.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.12 Identify CCIRs for Current Operations

<u>Description</u>: Users require the capability to identify the CCIRs for current operations as each COA is war gamed. These requirements are information and data the commander will have to make a decision. The information is necessary to identify, qualify, and understand risks prior to decision making. CCIRs extend across all staff functional areas and are dependent on specific COAs. The CCIRs are maintained in the CCIR data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.14.

Satisfaction Source: War gaming results data base files.

4.5.8.4.3.13 Project CCIR into Future Operations

<u>Description</u>: Users require the capability to project the CCIRs into future operations as each COA is war gamed. In projecting these CCIRs, the commander and staff predict, based on current operations and personal experience, what effect each COA will have on each specific functional area. The CCIRs are maintained in the CCIR data base.

Source Document: MCS UFD, Section 3.2.1.1.7.4.4.3.15.

Satisfaction Source: War gaming results data base files.

4.5.8.5 Compare COA Analysis Results

<u>Description</u>: Users need a decision aid to help them compare the various COAs against each other by either comparing the advantages and disadvantages of each course of action previously analyzed, or to isolate and compare decisive significant factors that are selected based on each situation. This tool will help them decide on the COA that offers the best prospect for success.

Source Documents: MCS UFD, Section 3.2.1.1.10.1; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8; STACCS UFD, Sections 3.2.2.4.4.7, 3.2.2.4.5 & 3.2.2.4.5.2.

4.5.8.5.1 Summarize COA Advantages

<u>Description</u>: Users require the capability to summarize the advantages of each COA.

Source Document: MCS UFD, Section 3.2.1.1.10.1.1

Satisfaction Source: War gaming results data base files.

4.5.8.5.2 Summarize COA Disadvantages

<u>Description</u>: Users require the capability to summarize the disadvantages of each COA.

Source Document: MCS UFD, Section 3.2.1.1.10.1.2

Satisfaction Source: War gaming results data base files.

4.5.8.5.3 Isolate Significant COA Factors

<u>Description</u>: Users require a decision support aid that compares the total advantages, disadvantages, limiting factors and constraints with the planning directive for each proposed COA. If required forces and support assets can be made available at the required place in the time frame contemplated, a COA is feasible. If an insufficient number of COAs are feasible, a guidance modification request is sent. isolates significant factors affecting each COA for identification and further analysis, as necessary.

Source Documents: MCS UFD, Section 3.2.1.1.10.1.4; STACCS UFD, Section 3.2.2.4.5.1.

Satisfaction Source: War gaming results data base files.

4.5.8.5.4 Review the Concept of the Operation

<u>Description</u>: Users require the capability to review the concept of operation to ensure that the COAs facilitate accomplishment of the mission.

Source Document: MCS UFD, Section 3.2.1.1.10.1.5.

Satisfaction Source: Extracted planning information and COA data base files.

4.5.8.5.5 Rank Order COAs, Best to Worst

<u>Description</u>: As a result of the COA analysis, users require the capability to rank order the COAs, best to worst.

Source Document: MCS UFD, Section 3.2.1.1.10.1.3.

Satisfaction Source: War gaming results data base files.

4.5.8.5.6 Select COA Which Best Supports Concept of the Operation

<u>Description</u>: Users require the capability to select the COA which best supports the concept of operation to recommend to the commander for execution.

Source Document: MCS UFD, Section 3.2.1.1.10.1.6.

Satisfaction Source: User-defined.

4.5.8.6 Provide BOS Recommendations on Force COAs

<u>Description</u>: Users require a decision support capability that assists them in analyzing the BOS assessments affecting each proposed COA, and in determining the total advantages, disadvantages, limiting factors and constraints for each. provides recommendations for each COA based upon the BOS assessments.

Source Documents: MCS UFD, Section 3.2.1.1.7.5; STACCS UFD, Section 3.2.2.4.7.

Satisfaction Source: Staff elements.

4.5.8.6.1 Request BOS Assessments

<u>Description</u>: Users require the capability to request COA assessments for each BOS from the staff. The seven systems are: maneuver; mobility, countermobility and survivability; fire support; air defense; intelligence; CSS; and C2.

Source Document: MCS UFD, Section 3.2.1.1.7.2

Satisfaction Source: Staff elements.

4.5.8.6.2 Receive BOS Assessments

<u>Description</u>: Users require the capability to provides BOS assessments for each COA. These assessments are incorporated into the synchronization matrix, as appropriate.

Source Document: MCS UFD, Section 3.2.1.1.7.3.

Satisfaction Source: Staff elements.

4.5.8.6.3 Incorporate BOS Recommendations

<u>Description</u>: Users require the capability to incorporate recommendations resulting from assessments of the BOS for each COA into the war gaming analysis results.

Source Document: MCS UFD, Section 3.2.1.1.7.6.

Satisfaction Source: BOS assessments data base files.

4.5.9 Conduct Risk Analysis/Assessment

<u>Description</u>: Users require the capability to determine the risks to the force for the COAs. Risk analysis examines and evaluates each COA for notable risks or undetected flaws, and is accomplished through operational-risk assessment. As part of this assessment, mission risks and hazards are identified, possible losses and costs are assessed, control measures are developed, and fratricide countermeasures are integrated and distributed.

Source Documents: MCS UFD, Section 3.2.1.1.8; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: COA data base files.

4.5.9.1 Identify Mission Risks/Hazards

<u>Description</u>: Users require the capability to identify mission risks and hazards for each COA through identification of the risk of mission failure or indecisive results, understanding of the mission, combat preparation status, and mission, enemy, troops, terrain, and time available (METT-T) analysis. The risks are listed by COA in a risk assessment matrix as necessary to facilitate comparison.

Source Document: MCS UFD, Section 3.2.1.1.8.1.

Satisfaction Source: COA data base files.

4.5.9.1.1 Identify Risks of Mission Failure

Description: Users require the capability to identify the risk of mission failure for each COA.

Source Document: MCS UFD, Section 3.2.1.1.8.1.1.

Satisfaction Source: COA data base files.

4.5.9.1.2 Identify Risks of Indecisive Results

<u>Description</u>: Users require the capability to identify the risk of achieving indecisive results for each COA.

Source Document: MCS UFD, Section 3.2.1.1.8.1.2.

Satisfaction Source: COA data base files.

4.5.9.1.3 Identify Understanding of the Mission

<u>Description</u>: Users require the capability to identify or reassess their understanding of the mission to be accomplished. They determine the clarity of the mission statement in each COA statement.

Source Document: MCS UFD, Section 3.2.1.1.8.1.3.

Satisfaction Source: Restated mission and COA data base files.

4.5.9.1.4 Identify Status of Combat Preparation

<u>Description</u>: Users require the capability to identify the combat preparation status of the unit and determine the unit's ability to accomplish the mission through execution of the proposed COAs.

Source Document: MCS UFD, Section 3.2.1.1.8.1.4.

Satisfaction Source: Friendly situation and COA data base files.

4.5.9.1.5 Identify METT-T Risks

<u>Description</u>: Users require the capability to identify operational risks of each COA through analysis of the METT-T factors.

Source Document: MCS UFD, Section 3.2.1.1.8.1.5.

<u>Satisfaction Source</u>: Restated mission, enemy and friendly situation, terrain analysis, time analysis, and COA data base files.

4.5.9.1.6 Develop METT-T Risks Assessment

<u>Description</u>: Users require the capability to develop the assessment of METT-T risks through application of each factor to the proposed COAs.

Source Document: MCS UFD, Section 3.2.1.1.8.1.6.

<u>Satisfaction Source</u>: Restated mission, enemy and friendly situation, terrain analysis, time analysis, and COA data base files.

4.5.9.2 Assess Possible Loss/Costs

<u>Description</u>: Users require the capability to assess possible losses and costs in terms of personnel and equipment for each COA. Each COA is evaluated, to include current and projected future operations.

Source Document: MCS UFD, Section 3.2.1.1.8.2.

Satisfaction Source: Supplies and equipment and COA data base files.

4.5.9.2.1 Assess Current COA Impacts

<u>Description</u>: Users require the capability to assess the probability of losses and the impact of those losses following the current COA.

Source Document: MCS UFD, Section 3.2.1.1.8.2.1.

Satisfaction Source: COA data base files.

4.5.9.2.1.1 Determine Probability of Loss

Description: Users require the capability to determine the probability of losses following the current

COA.

Source Document: MCS UFD, Section 3.2.1.1.8.2.1.1.

Satisfaction Source: COA data base files.

4.5.9.2.1.2 Assess Personnel Loss Impacts

<u>Description</u>: Users require the capability to assess impacts of personnel losses on the force and its ability to accomplish the mission.

Source Document: MCS UFD, Section 3.2.1.1.8.2.1.2.

Satisfaction Source: Personnel resources and COA data base files.

4.5.9.2.1.3 Assess Equipment Loss Impacts

<u>Description</u>: Users require the capability to assess the impacts of equipment losses on the force and its ability to accomplish the mission.

Source Document: MCS UFD, Section 3.2.1.1.8.2.1.3.

Satisfaction Source: Supplies and equipment and COA data base files.

4.5.9.2.2 Assess Future Operations Impacts

<u>Description</u>: Users require the capability to assess the impacts of future operations on the force and its ability to accomplish future missions.

Source Document: MCS UFD, Section 3.2.1.1.8.2.2.

Satisfaction Source: Friendly situation and COA data base files.

4.5.9.3 **Develop Control Measures**

<u>Description</u>: Users require the capability to develop control measures to assist the commander in

controlling the force during operations. Among those addressed are measures facilitating battlefield hazard marking,

land navigation, movement control, battle tracking, and combat identification markings.

Source Document: MCS UFD, Section 3.2.1.1.8.3.

Satisfaction Source: User-defined and NBC information and weather information data base files.

4.5.9.3.1 Mark Battlefield Hazards

Description: Users require the capability to provide marking of battlefield hazards through

dissemination of hazard graphics and notifications to higher headquarters and subordinate elements. Among the

hazards marked may be terrain that no longer supports maneuver such as flooded areas, areas contaminated with

NBC agents and materials, minefields, and unexploded munitions.

Source Document: MCS UFD, Section 3.2.1.1.8.3.3.

Satisfaction Source: User-defined and NBC information, weather information, and engineer data

base files.

4.5.9.3.2 **Develop Land Navigation Measures**

<u>Description</u>: Users require the capability to develop measures to assist in land navigation. Among

these may be graphical control measures showing passage lanes, axes of advance, checkpoints, and routes. Other

measures may be physical, such as direct and indirect fires or illumination on specific points on the battlefield.

Source Document: MCS UFD, Section 3.2.1.1.8.3.4.

Satisfaction Source: User-defined and SITMAP.

4-141

4.5.9.3.3 Develop Movement Control Measures

<u>Description</u>: Users require the capability to develop movement control measures to assist in control of forces on the battlefield and in the rear areas. Among these are graphical measures such as assembly areas, supply points, dispersal areas, supply routes, passage lanes, checkpoints, and phase lines. Physical measures may include manned traffic control points, march tables, and movement control centers.

Source Document: MCS UFD, Section 3.2.1.1.8.3.5.

Satisfaction Source: User-defined and convoy planning data base files.

4.5.9.3.4 Develop Battle Tracking Measures

<u>Description</u>: Users require the capability to develop measures to facilitate tracking of the battle. Among these are graphical measures such as avenues of approach, target reference points, axes of attack, objectives, checkpoints, and phase lines. Physical measures may include observation and listening posts, reconnaissance, and electronic surveillance.

Source Document: MCS UFD, Section 3.2.1.1.8.3.6.

Satisfaction Source: User-defined.

4.5.9.3.5 Prepare Combat Identification Markings

<u>Description</u>: Users require the capability to develop and prepare combat identification and marking systems to facilitate recognition and identification of friendly forces on the battlefield. Among these are patterned markings on vehicles and personnel, recognition signals, and marking panels.

Source Document: MCS UFD, Section 3.2.1.1.8.3.7.

Satisfaction Source: User-defined.

4.5.9.4 Integrate Fratricide Countermeasures

Description: Users require the capability to integrate fratricide countermeasures into the COAs.

Source Document: MCS UFD, Section 3.2.1.1.8.4.

Satisfaction Source: User-defined.

4.5.9.5 Distribute Fratricide Countermeasures

<u>Description</u>: Users require the capability to distribute fratricide countermeasures to subordinate units.

Source Document: MCS UFD, Section 3.2.1.1.8.5.

Satisfaction Source: User-defined.

4.5.10 Select a COA

<u>Description</u>: Users require the capability to recommend a COA to the commander based upon comparison of COA analysis results. Consideration is given to IPB products, COA advantages and disadvantages, concept of operations guidance, COA statements and sketches, and factors lists. The commander chooses a COA and issues any additional guidance for its execution.

Source Documents: MCS UFD, Section 3.2.1.1.10; STACCS UFD, Section 3.2.2.4.7.

Satisfaction Source: COA and war gaming results data base files.

4.5.10.1 Brief the Selected COAs

<u>Description</u>: Users require the capability to brief the selected COAs to the commander for decision. Consideration is given to enemy and IPB updates. The force mission, intent, selected COAs, and IPB updates are briefed.

Source Documents: MCS UFD, Sections 3.2.1.1.10.2; C&GSC ST 100-9, Pg 6-21.

<u>Satisfaction Source</u>: Enemy situation, friendly situation, extracted planning information, COA, assumptions lists, and restated mission data base files.

4.5.10.1.1 Receive Enemy/IPB Updates

<u>Description</u>: Users require the capability to receive enemy and IPB updates prior to starting the decision brief to ensure that the COA to be recommended is still valid.

Source Document: MCS UFD, Section 3.2.1.1.10.2.1.

Satisfaction Source: Enemy situation data base files.

4.5.10.1.2 Brief the Force Intent

<u>Description</u>: Users require the capability to brief the higher-echelon commander's intent to the force commander.

Source Document: MCS UFD, Section 3.2.1.1.10.2.3.

Satisfaction Source: Extracted planning information data base files.

4.5.10.1.3 Brief the Force Mission

<u>Description</u>: Users require the capability to brief the restated mission to the commander.

Source Document: MCS UFD, Section 3.2.1.1.10.2.2.

Satisfaction Source: Restated mission data base files.

4.5.10.1.4 Brief Own Force Status

<u>Description</u>: Users require the capability to brief the status of own forces to the commander.

Source Document: C&GSC ST 100-9, Pg 6-21.

Satisfaction Source: Friendly situation data base files.

4.5.10.1.5 Brief Updates to the IPB

<u>Description</u>: Users require the capability to brief IPB updates to the commander.

Source Document: MCS UFD, Section 3.2.1.1.10.2.6.

Satisfaction Source: Enemy situation data base files.

4.5.10.1.5.1 Brief the Most Probable Threat COA

<u>Description</u>: Users require the capability to brief the most probable threat COA to the commander.

Source Document: MCS UFD, Section 3.2.1.1.10.2.6.1.

Satisfaction Source: Enemy situation data base files.

4.5.10.1.5.2 Brief the Most Dangerous Threat COA

<u>Description</u>: Users require the capability to brief the most dangerous threat COA to the commander.

Source Document: MCS UFD, Section 3.2.1.1.10.2.6.2.

Satisfaction Source: Enemy situation data base files.

4.5.10.1.6 Brief the Selected Force COAs

<u>Description</u>: Users require the capability to brief the selected force COAs to the commander, including COA advantages, disadvantages, and the COA statements and sketches.

Source Document: MCS UFD, Section 3.2.1.1.10.2.4.

Satisfaction Source: COA data base files.

4.5.10.1.7 Brief Planning Assumptions

<u>Description</u>: Users require the capability to brief the planning assumptions to the commander.

Source Document: C&GSC ST 100-9, Pg 6-21.

Satisfaction Source: Assumptions lists data base files.

4.5.10.1.8 Brief the Consolidated Decision Support Matrix

<u>Description</u>: Users require the capability to brief the consolidated decision support matrix to the commander.

Source Document: MCS UFD, Section 3.2.1.1.10.2.5.

Satisfaction Source: COA data base files.

4.5.10.2 Brief the War Game and Risk Analysis Results

<u>Description</u>: Users require the capability to brief the war game and risk analysis results to the commander, providing facts, listing assumptions, risks assessments, opportunities, and possible losses/costs. They outline each COA and highlight the advantages and disadvantages of each. The briefing contains the branches and sequels identified during the war gaming.

Source Documents: MCS UFD, Sections 3.2.1.1.7.7 & 3.2.1.1.8.1.7; C&GSC ST 100-9, Pg 6-20.

Satisfaction Source: War gaming results and risk analysis data base files.

4.5.10.3 Brief COA Recommendations

<u>Description</u>: Users require the capability to recommend a COA based on war gaming and BOS assessments.

Source Document: MCS UFD, Sections 3.2.1.1.7.8 & 3.2.1.1.9.

Satisfaction Source: War gaming and BOS assessments data base files.

4.5.10.3.1 Recommend COA Based on War Gaming

<u>Description</u>: Users require the capability to recommend a COA based upon the war gaming results of each COA.

Source Document: MCS UFD, Section 3.2.1.1.9.1.

Satisfaction Source: War gaming results data base files.

4.5.10.3.2 Recommend COA Based on BOS Assessments

<u>Description</u>: Users require the capability to recommend a COA based on the BOS assessments of each COA.

Source Document: MCS UFD, Section 3.2.1.1.9.2.

Satisfaction Source: BOS assessments data base files.

4.5.10.4 Commander's COA Selection

<u>Description</u>: Users require the capability to select a COA for implementation.

Source Document: MCS UFD, Section 3.2.1.1.10.3.

Satisfaction Source: Commander.

4.5.10.5 Prepare Additional Commander's Guidance

<u>Description</u>: Users require the capability to prepare additional commander's guidance as directed by the commander upon approval of the selected COA.

Source Document: MCS UFD, Section 3.2.1.1.10.4.

Satisfaction Source: Commander.

4.5.10.6 Issue Additional Commander's Guidance

Description: Users require the capability to issue additional commander's guidance.

Source Document: MCS UFD, Section 3.2.1.1.10.5.

Satisfaction Source: Planning guidance data base files.

4.5.10.7 Update Task Organization

<u>Description</u>: Users require the capability to update the task organization as directed by the commander and reflected through allocation of subordinate units to subordinate headquarters.

Source Document: MCS UFD, Section 3.2.1.1.7.1.1.3.1.3.

Satisfaction Source: COA and friendly situation data base files.

4.5.11 Develop Decision Support Template (DST)

<u>Description</u>: Users require the capability to develop the DST for the operation, incorporating the CCIRs, the IPB DST, mission times, decision points, critical events, the scheme of maneuver, control measures, and the friendly situation.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.1.11; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.; FM 101-5, Pg H-36.

Satisfaction Source: COA and war gaming results data base files.

4.5.11.1 Incorporate CCIR

<u>Description</u>: Users require the capability to graphically incorporate the CCIRs into the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.1

Satisfaction Source: CCIR data base files.

4.5.11.2 Incorporate IPB DST

Description: Users require the capability to graphically incorporate the IPB DST into the overall

DST.

Source Document: MCS UFD, Sections 3.2.1.1.11.2, 3.2.1.1.11.3, & 3.2.1.1.11.10.

Satisfaction Source: Enemy situation data base files.

4.5.11.3 Incorporate Mission Times

<u>Description</u>: Users require the capability to graphically incorporate mission times into the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.4.

Satisfaction Source: Time analysis data base files.

4.5.11.3.1 Receive Time Phase Lines (TPL)

<u>Description</u>: Users require the capability to receive TPL from the commander and G3/S3.

Source Document: MCS UFD, Section 3.2.1.1.11.4.1.

Satisfaction Source: User-defined.

4.5.11.3.2 Receive Mission Time Estimates

<u>Description</u>: Users require the capability to receive mission time estimates from the war gaming

process.

Source Document: MCS UFD, Section 3.2.1.1.11.4.2.

Satisfaction Source: War gaming results data base files.

4.5.11.4 Incorporate Decision Points

Description: Users require the capability to graphically incorporate decision points into the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.5.

Satisfaction Source: Decision points list data base files.

4.5.11.5 Incorporate Critical Events

Description: Users require the capability to graphically incorporate critical events into the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.6.

Satisfaction Source: Critical events list data base files.

4.5.11.6 Incorporate the Scheme of Maneuver

<u>Description</u>: Users require the capability to graphically incorporate the scheme of maneuver into

the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.7.

Satisfaction Source: COA and war gaming results data base files.

4.5.11.7 Incorporate Control Measures

<u>Description</u>: Users require the capability to graphically incorporate control measures into the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.8.

Satisfaction Source: Control measures data base files.

4.5.11.8 Incorporate the Friendly Situation

<u>Description</u>: Users require the capability to graphically incorporate the friendly situation into the

DST.

Source Document: MCS UFD, Section 3.2.1.1.11.9.

Satisfaction Source: Friendly situation data base files.

4.5.11.9 Plot the DST to the Situation Map

<u>Description</u>: Users require the capability to plot the DST, normally in overlay form, to the situation

map.

Source Document: MCS UFD, Section 3.2.1.1.11.11.

Satisfaction Source: DST data base files.

4.5.11.10 Maintain the DST

<u>Description</u>: Users require the capability to electronically store, retrieve, modify, update and display

the DST.

Source Document: MCS UFD, Section 3.2.1.1.11.12.

Satisfaction Source: DST data base files.

4.5.11.11 Distribute the DST

<u>Description</u>: Users require the capability to distribute the DST to staff and subordinate elements,

plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.11.13.

Satisfaction Source: DST data base files.

4.5.11.12 Print DST Support Products

<u>Description</u>: Users require the capability to print DST support products using hardware and software available to the recipient.

Source Document: MCS UFD, Section 3.2.1.1.11.14.

Satisfaction Source: DST data base files.

4.5.12 Develop DST Synchronization (DST-SYNCH) Matrix

<u>Description</u>: Users require the capability to develop the DST-SYNCH matrix during the war gaming portion of the COA analysis. The matrix depicts decisions required at each TPL.

Source Documents: MCS UFD, Section 3.2.1.1.12; FBCB2 UFD, Sections 3.4.6.7 & 3.4.6.8.

Satisfaction Source: War gaming results, DST, COA, and CCIR data base files.

4.5.12.1 Access Synchronization Matrix

<u>Description</u>: Users require the capability to electronically access the synchronization matrix from the data base.

Source Document: MCS UFD, Section 3.2.1.1.12.1.

Satisfaction Source: War gaming results data base files.

4.5.12.2 Access DST

Description: Users require the capability to electronically access the DST from the data base.

Source Document: MCS UFD, Section 3.2.1.1.12.2.

Satisfaction Source: DST data base files.

4.5.12.3 Access Force Plan Information

<u>Description</u>: Users require the capability to electronically access force plan information from the data base.

Source Document: MCS UFD, Section 3.2.1.1.12.3.

Satisfaction Source: COA data base files.

4.5.12.4 Fuse Synchronization Matrix/Plan/DST

<u>Description</u>: Users require the capability to combine the synchronization matrix, DST, and the operation plan into a single decision support product.

Source Document: MCS UFD, Section 3.2.1.1.12.4.

Satisfaction Source: War gaming, DST, and COA data base files.

4.5.12.5 Depict Decisions at Each TPL

Description: Users require the capability to depict decisions at each TPL on the DST.

Source Document: MCS UFD, Section 3.2.1.1.12.5.

Satisfaction Source: DST data base files.

4.5.12.6 Depict CCIRs for Mission Monitor

<u>Description</u>: Users require the capability to depict in the DST the CCIRs that aid in monitoring the mission and which facilitate identification of events that pertain to those requirements.

Source Document: MCS UFD, Section 3.2.1.1.12.6.

Satisfaction Source: CCIR data base files.

4.5.12.7 Plot the DST-SYNCH Matrix to the Situation Map

<u>Description</u>: Users require the capability to plot the DST-SYNCH matrix, normally in overlay form, to the situation map.

Source Document: MCS UFD, Section 3.2.1.1.12.7.

Satisfaction Source: DST-DSM data base files.

4.5.12.7.1 Display the DST-SYNCH Matrix

<u>Description</u>: Users require the capability to electronically display the DST-SYNCH matrix using hardware and software available.

Source Document: MCS UFD, Section 3.2.1.1.12.7.1.

Satisfaction Source: DST-DSM data base files.

4.5.12.8 Maintain the DST-SYNCH Matrix

<u>Description</u>: Users require the capability to electronically store, retrieve, modify, update, and display the DST-SYNCH matrix is.

Source Document: MCS UFD, Section 3.2.1.1.12.8.

Satisfaction Source: DST-DSM data base files.

4.5.12.8.1 Update the DST-SYNCH Matrix

<u>Description</u>: Users require the capability to update the DST-SYNCH matrix manually and electronically, using hardware and software available.

Source Document: MCS UFD, Section 3.2.1.1.12.8.1.

Satisfaction Source: DST-DSM data base files.

4.5.12.9 Distribute the DST-SYNCH Matrix

<u>Description</u>: Users require the capability to distribute the DST-SYNCH matrix to staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.1.12.9.

Satisfaction Source: DST-DSM data base files.

4.5.12.10 Print DST-SYNCH Matrix Products

<u>Description</u>: Users require the capability to print DST-SYNCH matrix products using hardware and software available.

Source Document: MCS UFD, Section 3.2.1.1.12.10.

Satisfaction Source: DST-DSM data base files.

4.5.13 Provide On-Line Force Doctrine

<u>Description</u>: Users require the capability to display current versions of field manuals, student texts, army regulations, guides, handbooks, and weapons data for reference. (See the Standard Reference Files common function [Section 15] for a decomposition.)

Source Document: MCS UFD, Section 3.2.1.1.13.

Satisfaction Source: Standard Reference Library data base files.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 5

OPLAN/OPORD/ANNEX GENERATOR FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the OPLAN/OPORD/Annex generator common user requirements.

5.1 FUNCTION NAME

OPLAN/OPORD/Annex Generator

5.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to generate operation plans, orders, and annexes, and fragmentary orders (FRAGO).

5.3 FUNCTION DESCRIPTION

The OPLA N/OPORD/A nnex Generator function supports commanders and staffs (combat, combat support, and combat service support) in expanding into plans and orders the course of action (COA) the commander selected using the COA Development and Analysis common function. It assists them in preparing and issuing OPLANs, OPORDs, annexes, and FRAGOs. It will support the generation and dissemination of OPLANs, OPORDs, and annexes under combat, as well as deliberate, decision-making conditions. Using this function, users will also be able to develop joint operations plans, supporting plans, and contingency plans, and perform plans maintenance. It will facilitate battle command by automating OPLAN/OPORD/Annex generation throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Prepare functional area annexes and overlays as input to OPLANs and OPORDs.
- Receive functional area and other input to OPLANs and OPORDs.

- Compile functional area and other input into plans and orders.
- Distribute plans and orders.
- Convert an OPLAN into an OPORD.
- Prepare and issue FRAGOs.
- Develop and maintain a FRAGO summary list.
- Prepare and issue a free-text order.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute OPLANs, OPORDs, FRAGOs, and other types of plans and orders.

5.4 REFERENCES

The following documents provided the user requirements for this function:

- FM 101-5, Command and Control for Commanders and Staffs.
- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.4.5.1 & 3.2.1.4.9
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 3.2.1.2.1,
 3.2.1.2.2, 3.2.1.2.3, & 3.2.1.3.1.2
- Standard Theater Army Command and Control System (STACCS) UFD, Sections
 3.2.2.1.4 & 3.2.2.7
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Sections 3.4.7 & 3.4.17

5.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figures 5-1 through 5-5 depict the hierarchy of the user functional requirements.

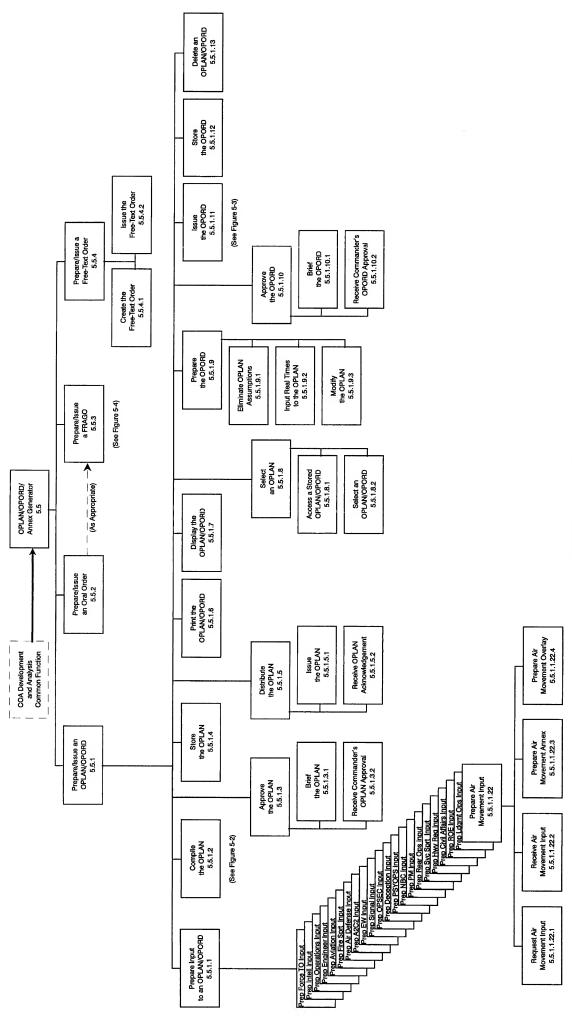


Fig 5-1 OPLAN/OPORD/Annex Generator Decomposition

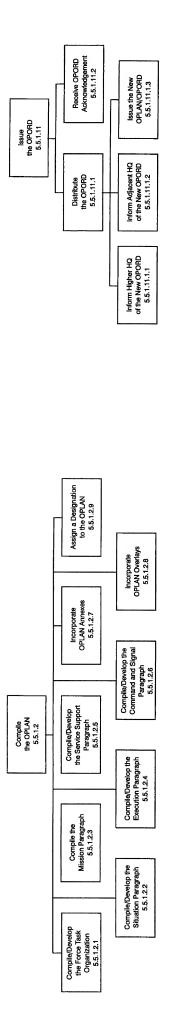


Fig 5-2 Compile the OPLAN Decomposition

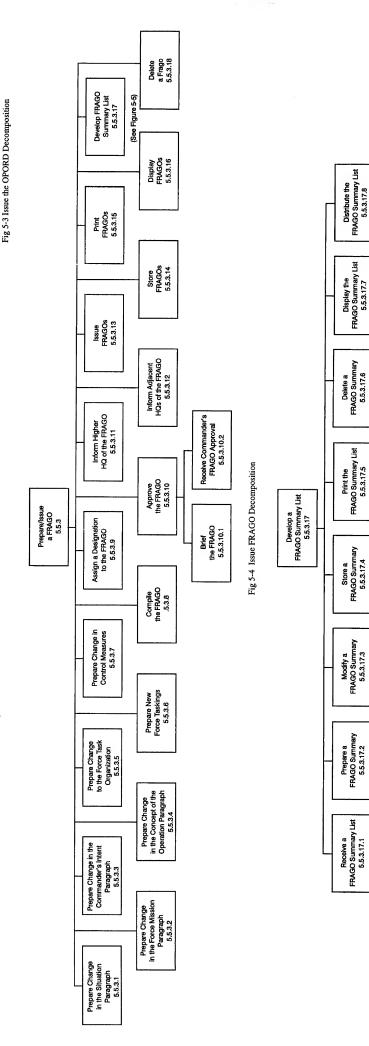


Fig 5-5 Develop FRAGO Summary List Decomposition

5.5.1 Prepare/Issue OPLAN/OPORD

Description: Users require the capability to expand the COA selected by the commander with the COA Development and Analysis common function, into a campaign or OPLAN using in-theater forces, and to upload the required time-phased force deployment data (TPFDD) into the Joint Operation Planning and Execution System (JOPES). The staff prepares the OPLAN or OPORD through input of civil-affairs, intelligence, service support, operations, task organization, air defense, fire support, engineer, nuclear, biological, and chemical (NBC), aviation, army airspace command and control (A2C2), signal, operations security (OPSEC), electronic warfare (EW), deception, provost marshal (PM), rear operations, psychological operations (PSYOPS), highway regulation, air movement, lodgment operations, and rules of engagement (ROE) information. The information is compiled into the plan, which is then approved, stored, distributed, printed, and displayed. Upon selection of a plan, the corresponding order is prepared, approved, issued, and stored. Users require the capability to prepare the OPLAN or OPORD in JOPES format, including the basic plan, all required annexes and appendices, and other administrative documents. The OPLAN/OPORD/Annex Generator will allow users to enter OPLAN/OPORD/Annex information in a screen window while simultaneously displaying a map and operational graphics of the area of operations. It will allow users to display an OPORD other than the one currently in use. The function will have available as a product, at any given time, the OPORD, if the unit is executing a mission, and any number of contingency plans (OPLANS) that could or will be executed given the order to conduct a mission. In addition to the actual OPLANs/OPORDs, the information developed during COA development and analysis (see section 4) will be associated to the OPLANs/OPORDs and available for review. OPLANs/OPORDs will be retrievable by Operation Name, Nickname, Number, or mission statement. OPLANs/OPORDs consist of text, matrixes, and graphics IAW FM 101-5.

Source Documents: MCS UFD, Sections 2.4.6.1.3 & 3.2.1.2.1; STACCS UFD, Section 3.2.2.14.2; AGCCS SSS, Section 3.2.1.4.9.1; FBCB2 UFD, Section 3.4.7.

Satisfaction Source: All functional area data base files.

5.5.1.1 Prepare Input to an OPLAN/OPORD

<u>Description</u>: Users require an automated capability to develop and distribute functional area annexes, overlays, and other input to OPLANs and OPORDs. Users will be able to prepare annexes and overlays in the following functional areas: task organization, operations, aviation, A2C2, OPSEC, service support, PYSOPS, NBC, intelligence, signal, fire support, air defense, EW, deception, engineer, PM, rear operations, highway regulation, civil affairs, ROE, lodgement operations, air movement, and others, as appropriate. The system will provide staff users with the capability to transmit draft annexes and overlays for coordination with other staff sections, for

recipients to provide comments to these draft annexes and overlays, and for final annexes and overlays to be merged into the OPLAN or OPORD.

<u>Source Documents</u>: STACCS UFD, Section 3.2.2.14.3; FBCB2 UFD, Sections 3.4.7.7.1, 3.4.7.8.1, 3.4.7.7.2, 3.4.7.8.2, & 3.4.17.

Satisfaction Source: All functional area data base files.

5.5.1.1.1 Prepare Force Task Organization Input

Description: The OPLAN task organization is formulated through preparation of graphical and textual task organization information requested and received from the G3/S3 (Plans). The user requires an automated capability to easily and quickly build a task organization. The user will be able to try various combinations of units (including joint and Allied forces) to construct a notional task organization, and to analyze the potential effects on the force of task organizing in this manner. Additionally, the user needs help in identifying the required doctrinal support for the task organizing options. The user will be able to select, from within allocated resources, the task organization to best meet the conflicting objectives of accomplishing the mission, while minimizing the impact on the force. This sourcing process will automatically evaluate and identify those units most capable of meeting task requirements, and will also consider unit readiness status. The user will be able to quickly manipulate the data to generate options for task organization and to select the best one; to save the chosen task organization configuration; to use this configuration as the baseline for further task organization analysis; and to discard any changed task organization configuration file and start over again. The application will also identify unsourced requirements, and assist the user in transmitting these requirements to higher headquarters for sourcing.

Source Documents: MCS UFD, Section 3.2.1.2.1.5; STACCS UFD, Sections 3.2.2.7 & 3.2.2.7.1; AGCCS SSS, Section 3.2.1.4.5.1.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.1.1 Prepare Graphical Force Task Organization

<u>Description</u>: Users require the capability to prepare the graphical task organization of the force using doctrinal listing conventions and symbols.

Source Document: MCS UFD, Section 3.2.1.2.1.5.1.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.1.2 Prepare Textual Force Task Organization

<u>Description</u>: Users require the capability to prepare the textual task organization using doctrinal listing conventions.

Source Document: MCS UFD, Section 3.2.1.2.1.5.2.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.1.3 Display Graphical Force Task Organization

<u>Description</u>: Users require the capability to display the graphical task organization in a usable format using available hardware and software.

Source Document: MCS UFD, Section 3.2.1.2.1.5.3.

Satisfaction Source: Force task organization data base files.

5.5.1.1.1.4 Request Force Task Organization Input

Description: Users require the capability to request task organization input from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.5.4.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.1.5 Receive Force Task Organization Input

<u>Description</u>: Users require the capability to receive task organization input from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.5.5.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.1.6 Modify Force Task Organization Graphically

<u>Description</u>: Users require the capability to graphically modify the task organization, as necessary,

to the reflect current or projected force structure.

Source Document: MCS UFD, Section 3.2.1.2.1.5.6.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.2 Prepare Intelligence Input

Description: Intelligence input is prepared by requesting and receiving information from the G2/S2

and intelligence and electronic warfare (IEW) sources, and by preparing the intelligence annex and overlays.

Intelligence staff users require an automation-supported capability to develop and finalize the intelligence annex and

overlay to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order

format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while

preparing the supporting annex and overlay. Users will also be able to transmit draft annexes and overlays to other

users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to

operations staffs for attachment to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.2; STACCS UFD, Section 3.2.2.14.3.4.

Satisfaction Source: Enemy situation data base files.

Request Intelligence Input 5.5.1.1.2.1

Description: Users require the capability to request intelligence input from the G2/S2 and IEW

sources.

Source Document: MCS UFD, Section 3.2.1.2.1.2.1.

Satisfaction Source: Enemy situation data base files.

5-9

5.5.1.1.2.2 Receive Intelligence Input

<u>Description</u>: Users require the capability to receive intelligence input from the G2/S2 and IEW sources.

Source Document: MCS UFD, Section 3.2.1.2.1.2.2.

Satisfaction Source: Enemy situation data base files.

5.5.1.1.2.3 Prepare Intelligence Annexes

<u>Description</u>: Users require the capability to prepare the intelligence annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.2.3.

Satisfaction Source: Enemy situation data base files.

5.5.1.1.2.4 Prepare Intelligence Overlays

<u>Description</u>: Users require the capability to prepare intelligence overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.2.4.

Satisfaction Source: Enemy situation data base files.

5.5.1.1.3 Prepare Operations Input

<u>Description</u>: Users require the capability to prepare operations input by requesting and receiving operations input from the G3/S3 (Plans), and preparing the operations annexes and overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.4.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.3.1 Request Operations Input

Description: Users require the capability to request operations input from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.4.1.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.3.2 Receive Operations Input

Description: Users require the capability to receive operations input from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.4.2.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.3.3 Prepare Operations Annexes

Description: Users require the capability to prepare the operations annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.4.3.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.3.4 Prepare Operations Overlays

<u>Description</u>: Users require the capability to prepare the operations overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.4.4.

Satisfaction Source: Friendly situation and COA data base files.

5.5.1.1.4 Prepare Engineer Input

<u>Description</u>: Engineer input is prepared by requesting and receiving engineer information from the

force engineer and engineer sources, and preparing the engineer annexes and overlays. Engineer staff users require

an automation-supported capability to develop and finalize the engineer annex and overlays to OPLANs and

OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise

specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex

and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to

prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment

to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.8; STACCS UFD, Section 3.2.2.14.3.10.

Satisfaction Source: Engineer and COA data base files.

5.5.1.1.4.1 Request Engineer Input

Description: Users require the capability to request engineer input from the force engineer and

engineer sources.

Source Document: MCS UFD, Section 3.2.1.2.1.8.1

Satisfaction Source: Engineer and COA data base files.

Receive Engineer Input 5.5.1.1.4.2

Description: Users require the capability to receive engineer input from the force engineer and

engineer sources.

Source Document: MCS UFD, Section 3.2.1.2.1.8.2.

Satisfaction Source: Engineer and COA data base files.

5-12

5.5.1.1.4.3 Prepare Engineer Annexes

Description: Users require the capability to prepare the engineer annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.8.3.

Satisfaction Source: Engineer and COA data base files.

5.5.1.1.4.4 Prepare Engineer Overlays

Description: Users require the capability to prepare the engineer overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.8.4.

Satisfaction Source: Engineer and COA data base files.

5.5.1.1.5 Prepare Aviation Input

<u>Description</u>: Users require the capability to prepare aviation input by requesting and receiving information from the staff aviation officer and other aviation sources, and preparing the aviation annexes and overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.11.

Satisfaction Source: Aviation and COA data base files.

5.5.1.1.5.1 Request Aviation Input

<u>Description</u>: Users require the capability to request aviation input from the staff aviation officer and other aviation sources.

Source Document: MCS UFD, Section 3.2.1.2.1.11.1.

Satisfaction Source: Aviation and COA data base files.

5.5.1.1.5.2 Receive Aviation Input

<u>Description</u>: Users require the capability to receive aviation input from the staff aviation officer and other aviation sources.

Source Document: MCS UFD, Section 3.2.1.2.1.11.2.

Satisfaction Source: Aviation and COA data base files.

5.5.1.1.5.3 Prepare Aviation Annexes

<u>Description</u>: Users require the capability to prepare the aviation annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.11.3.

Satisfaction Source: Aviation and COA data base files.

5.5.1.1.5.4 Prepare Aviation Overlays

Description: Users require the capability to prepare the aviation overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.11.4.

Satisfaction Source: Aviation and COA data base files.

5.5.1.1.6 Prepare Fire Support Input

<u>Description</u>: Fires support input is prepared by requesting and receiving fire support information from the Fire Support Coordination Officer (FSCOORD) and fire support sources, and preparing the fire support annexes and overlays. Fire support staff users require an automation-supported capability to develop and finalize the fire support annex and overlays to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.7; STACCS UFD, Section 3.2.2.14.3.6.

Satisfaction Source: Fire support and COA data base files.

5.5.1.1.6.1 Request Fire Support Input

<u>Description</u>: Users require the capability to request fire support input from the FSCOORD and fire support sources.

Source Document: MCS UFD, Section 3.2.1.2.1.7.1.

Satisfaction Source: Fire support and COA data base files.

5.5.1.1.6.2 Receive Fire Support Input

<u>Description</u>: Users require the capability to request fire support input from the FSCOORD and fire support sources.

Source Document: MCS UFD, Section 3.2.1.2.1.7.2.

Satisfaction Source: Fire support and COA data base files.

5.5.1.1.6.3 Prepare Fire Support Annexes

<u>Description</u>: Users require the capability to prepare the fire support annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.7.3.

Satisfaction Source: Fire support and COA data base files.

5.5.1.1.6.4 Prepare Fire Support Overlays

<u>Description</u>: Users require the capability to prepare the fire support overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.7.4.

Satisfaction Source: Fire support and COA data base files.

5.5.1.1.7 Prepare Air Defense Input

<u>Description</u>: Air defense input is prepared by requesting and receiving information from air defense sources, and preparing the air defense annexes and overlays. Air defense staff users require an automation-supported capability to develop and finalize the air defense annex and overlays to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.6; STACCS UFD, Section 3.2.2.14.3.7.

Satisfaction Source: Air defense and COA data base files.

5.5.1.1.7.1 Request Air Defense Input

<u>Description</u>: Users require the capability to request air defense input from air defense sources.

Source Document: MCS UFD, Section 3.2.1.2.1.6.1.

Satisfaction Source: Air defense and COA data base files.

5.5.1.1.7.2 Receive Air Defense Input

Description: Users require the capability to receive air defense input from air defense sources.

Source Document: MCS UFD, Section 3.2.1.2.1.6.2.

Satisfaction Source: Air defense and COA data base files.

5.5.1.1.7.3 Prepare Air Defense Annexes

Description: Users require the capability to prepare the air defense annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.6.3.

Satisfaction Source: Air defense and COA data base files.

5.5.1.1.7.4 Prepare Air Defense Overlays

<u>Description</u>: Users require the capability to prepare the air defense overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.6.4.

Satisfaction Source: Air defense and COA data base files.

5.5.1.1.8 Prepare A2C2 Input

<u>Description</u>: Users require the capability to prepare A2C2 input by requesting and receiving information from the staff aviation and Air Force liaison officers and other air/aviation sources, and preparing the A2C2 annexes and overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.10.

Satisfaction Source: A2C2 and COA data base files.

5.5.1.1.8.1 Request A2C2 Input

<u>Description</u>: Users require the capability to request A2C2 input from the staff aviation and Air Force liaison officers and other air/aviation sources.

Source Document: MCS UFD, Section 3.2.1.2.1.10.1.

Satisfaction Source: A2C2 and COA data base files.

5.5.1.1.8.2 Receive A2C2 Input

<u>Description</u>: Users require the capability to receive A2C2 input from the staff aviation and Air Force liaison officers and other air/aviation sources.

Source Document: MCS UFD, Section 3.2.1.2.1.10.2.

Satisfaction Source: A2C2 and COA data base files.

5.5.1.1.8.3 Prepare A2C2 Annexes

<u>Description</u>: Users require the capability to prepare the A2C2 annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.10.3.

Satisfaction Source: A2C2 and COA data base files.

5.5.1.1.8.4 Prepare A2C2 Overlays

Description: Users require the capability to prepare the A2C2 overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.10.4.

Satisfaction Source: A2C2 and COA data base files.

5.5.1.1.9 Prepare EW Input

<u>Description</u>: EW input is prepared by requesting information from the G2/S2 and IEW sources, and preparing the EW annexes and overlays. EW staff users require an automation-supported capability to develop and finalize the EW annex and overlays to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.14; STACCS UFD, Section 3.2.2.14.3.8.

Satisfaction Source: EW and COA data base files.

5.5.1.1.9.1 Request EW Input

Description: Users require the capability to request EW input from the G2/S2 and IEW sources.

Source Document: MCS UFD, Section 3.2.1.2.1.14.1.

Satisfaction Source: EW and COA data base files.

5.5.1.1.9.2 Receive EW Input

Description: Users require the capability to receive EW input from the G2/S2 and IEW sources.

Source Document: MCS UFD, Section 3.2.1.2.1.14.2.

Satisfaction Source: EW and COA data base files.

5.5.1.1.9.3 Prepare EW Annexes

<u>Description</u>: Users require the capability to prepare the EW annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.14.3.

Satisfaction Source: EW and COA data base files.

5.5.1.1.9.4 Prepare EW Overlays

<u>Description</u>: Users require the capability to prepare the EW overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.14.4.

Satisfaction Source: EW and COA data base files.

5.5.1.1.10 Prepare Signal Input

Description: Signal input is prepared by requesting and receiving information from the staff signal officer, and preparing the signal annex and overlays. Signal staff users require an automation-supported capability to develop and finalize the signal annex and overlays to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.12; STACCS UFD, Section 3.2.2.14.3.5.

Satisfaction Source: Signal and COA data base files.

5.5.1.1.10.1 Request Signal Input

<u>Description</u>: Users require the capability to request signal input from the staff signal officer.

Source Document: MCS UFD, Section 3.2.1.2.1.12.1.

Satisfaction Source: Signal and COA data base files.

5.5.1.1.10.2 Receive Signal Input

<u>Description</u>: Users require the capability to receive signal input from the staff signal officer.

Source Document: MCS UFD, Section 3.2.1.2.1.12.2.

Satisfaction Source: Signal and COA data base files.

5.5.1.1.10.3 Prepare Signal Annex

Description: Users require the capability to prepare the signal annex.

Source Document: MCS UFD, Section 3.2.1.2.1.12.3.

Satisfaction Source: Signal and COA data base files.

5.5.1.1.10.4 Prepare Signal Overlays

Description: Users require the capability to prepare the signal overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.12.4.

Satisfaction Source: Signal and COA data base files.

5.5.1.1.11 Prepare OPSEC Input

<u>Description</u>: Users require the capability to prepare OPSEC input by requesting and receiving information from the G2/S2, G3/S3 (Plans), and other security sources, and preparing the OPSEC annex.

Source Document: MCS UFD, Section 3.2.1.2.1.13.

Satisfaction Source: OPSEC and COA data base files.

5.5.1.1.11.1 Request OPSEC Input

<u>Description</u>: Users require the capability to request OPSEC input from the G2/S2, G3/S3 (Plans), and other security sources.

Source Document: MCS UFD, Section 3.2.1.2.1.13.1.

Satisfaction Source: OPSEC and COA data base files.

5.5.1.1.11.2 Receive OPSEC Input

<u>Description</u>: Users require the capability to receive OPSEC input from the G2/S2, G3/S3 (Plans), and other security sources.

Source Document: MCS UFD, Section 3.2.1.2.1.13.2.

Satisfaction Source: OPSEC and COA data base files.

5.5.1.1.11.3 Prepare OPSEC Annex

<u>Description</u>: Users require the capability to prepare the OPSEC annex.

Source Document: MCS UFD, Section 3.2.1.2.1.13.3.

Satisfaction Source: OPSEC and COA data base files.

5.5.1.1.12 Prepare Deception Input

Description: Deception input is prepared by requesting information from the G3/S3, G2/S2, and IEW sources, and preparing the deception annex and overlay. Deception staff users require an automation-supported capability to develop and finalize the deception annex and overlays to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment to the OPLAN/OPORD, or to other users as required. This capability will ensure that the operational and tactical deception plans are consistent with the strategic deception plan, and that they focus on the enemy's expectations, preconceptions, and fears concerning friendly intent, in order to deceive the enemy operational commander about true friendly intentions. The deception plan will utilize the entire joint classified remote data bases that contain intelligence and drug operations information.

Source Documents: MCS UFD, Section 3.2.1.2.1.15; STACCS UFD, Section 3.2.2.14.3.9; AGCCS SSS, Section 3.2.1.4.9.3.

Satisfaction Source: Deception, enemy situation, and COA data base files.

5.5.1.1.12.1 Request Deception Input

<u>Description</u>: Users require the capability to request deception input from the G3/S3 in the form of deception OPLAN information, and from the G2/S2 and IEW sources.

Source Document: MCS UFD, Section 3.2.1.2.1.15.1.

Satisfaction Source: Deception, enemy situation, and COA data base files.

5.5.1.1.12.2 Receive Deception Input

Description: Users require the capability to receive deception input from the G3/S3, G2/S2, and

IEW sources.

Source Document: MCS UFD, Section 3.2.1.2.1.15.2.

Satisfaction Source: Deception, enemy situation, and COA data base files.

5.5.1.1.12.3 Prepare Deception Annex

Description: Users require the capability to prepare the deception annex.

Source Document: MCS UFD, Section 3.2.1.2.1.15.3.

Satisfaction Source: Deception, enemy situation, and COA data base files.

5.5.1.1.12.4 Prepare Deception Overlay

<u>Description</u>: Users require the capability to prepare the deception overlay.

Source Document: MCS UFD, Section 3.2.1.2.1.15.4.

Satisfaction Source: Deception, enemy situation, and COA data base files.

5.5.1.1.13 Prepare PSYOPS Input

Description: PSYOPS input is prepared by requesting and receiving information from the G3/S3 (Plans), G2/S2, PSYOPS staff officer, and other PSYOPS sources, and preparing the PSYOPS annexes and overlays. The PSYOPS staff user requires automated assistance to prepare the PSYOPS annex to an OPLAN or OPORD, and to automatically integrate the PSYOPS annex into the final OPLAN/OPORD. The PSYOPS user also requires a

capability to assess the effectiveness of the on-going PSYOPS campaign and to provide feedback to the supported unit commander in the form of a PSYOPS situation report (SITREP). Additionally, the user requires a capability to electronically transmit the PSYOPS SITREP to higher, lower, and adjacent PSYOPS units.

Source Documents: MCS UFD, Section 3.2.1.2.1.17; STACCS UFD, Section 3.2.2.14.3.2.

Satisfaction Source: PSYOPS, enemy situation, and COA data base files.

5.5.1.1.13.1 Request PSYOPS Input

<u>Description</u>: Users require the capability to request PSYOPS input from the G3/S3 (Plans), G2/S2, PSYOPS staff officer, and other PSYOPS sources.

Source Document: MCS UFD, Section 3.2.1.2.1.17.1.

Satisfaction Source: PSYOPS, enemy situation, and COA data base files.

5.5.1.1.13.2 Receive PSYOPS Input

<u>Description</u>: Users require the capability to receive PSYOPS input from the G3/S3 (Plans), G2/S2, PSYOPS staff officer, and other PSYOPS sources.

Source Document: MCS UFD, Section 3.2.1.2.1.17.2.

Satisfaction Source: PSYOPS, enemy situation, and COA data base files.

5.5.1.1.13.3 Prepare PSYOPS Annexes

<u>Description</u>: Users require the capability to prepare the PSYOPS annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.17.3.

Satisfaction Source: PSYOPS, enemy situation, and COA data base files.

5.5.1.1.13.4 Prepare PSYOPS Overlays

Description: Users require the capability to prepare the PSYOPS overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.17.4.

Satisfaction Source: PSYOPS, enemy situation, and COA data base files.

5.5.1.1.14 Prepare NBC Input

<u>Description</u>: NBC input is prepared by requesting and receiving NBC information from the staff NBC warfare officer and NBC sources, and preparing the NBC annexes and overlays. NBC staff users require a capability to support the preparation of appropriate annexes and appendices to operational plans and orders, to include smoke planning and planning for chemical response to enemy use of chemicals. The capability will allow the NBC staff planner an automated means to receive and prepare plans and orders in support of NBC operations, coordinate actions, and disseminate information relating to NBC assets (i.e., units, equipment) in support of the commander's guidance.

Source Documents: MCS UFD, Section 3.2.1.2.1.9; STACCS UFD, Section 3.2.2.14.3.3.

Satisfaction Source: NBC and COA data base files.

5.5.1.1.14.1 Request NBC Input

<u>Description</u>: Users require the capability to request NBC input from the staff NBC warfare officer and NBC sources.

Source Document: MCS UFD, Section 3.2.1.2.1.9.1.

Satisfaction Source: NBC and COA data base files.

5.5.1.1.14.2 Receive NBC Input

<u>Description</u>: Users require the capability to receive NBC input from the staff NBC warfare officer and NBC sources.

Source Document: MCS UFD, Section 3.2.1.2.1.9.2.

Satisfaction Source: NBC and COA data base files.

5.5.1.1.14.3 Prepare NBC Annexes

<u>Description</u>: Users require the capability to prepare the NBC annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.9.3.

Satisfaction Source: NBC and COA data base files.

5.5.1.1.14.4 Prepare NBC Overlays

<u>Description</u>: Users require the capability to prepare the NBC overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.9.4.

Satisfaction Source: NBC and COA data base files.

5.5.1.1.15 Prepare PM Input

<u>Description</u>: Users require the capability to request PM input by requesting information from the provost marshal, and preparing the PM annexes and overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.16.

Satisfaction Source: PM and COA data base files, and MPACS.

5.5.1.1.15.1 Request PM Input

<u>Description</u>: Users require the capability to request PM input from the provost marshal.

Source Document: MCS UFD, Section 3.2.1.2.1.16.1.

Satisfaction Source: PM and COA data base files, and MPACS.

5.5.1.1.15.2 Receive PM Input

<u>Description</u>: Users require the capability to receive PM input from the provost marshal.

Source Document: MCS UFD, Section 3.2.1.2.1.16.2.

Satisfaction Source: PM and COA data base files, and MPACS.

5.5.1.1.15.3 Prepare PM Annexes

<u>Description</u>: Users require the capability to prepare the PM annexes.

Source Document: MCS UFD, Section 3.2.1.2.1.16.3.

Satisfaction Source: PM and COA data base files, and MPACS.

5.5.1.1.15.4 Prepare PM Overlays

<u>Description</u>: Users require the capability to prepare the PM overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.16.4.

Satisfaction Source: PM and COA data base files, and MPACS.

5.5.1.1.16 Prepare Rear Operations Input

<u>Description</u>: Users require the capability to prepare rear operations input by requesting information from the PM, G3/S3, G2/S2, G4/S4, and other rear operations sources, and preparing the rear operations annexes and overlays.

Source Document: FM 101-5, Figure H-1.

Satisfaction Source: Rear operations and COA data base files.

5.5.1.1.16.1 Request Rear Operations Input

<u>Description</u>: Users require the capability to request rear operations input from the PM, G3/S3, G2/S2, G4/S4, and other rear operations sources.

Source Document: FM 101-5, Figure H-1.

Satisfaction Source: Rear operations and COA data base files.

5.5.1.1.16.2 Receive Rear Operations Input

<u>Description</u>: Users require the capability to receive rear operations input from the PM, G3/S3, G2/S2, G4/S4, and other rear operations sources.

Source Document: FM 101-5, Figure H-1.

Satisfaction Source: Rear operations and COA data base files.

5.5.1.1.16.3 Prepare Rear Operations Annex

<u>Description</u>: Users require the capability to prepare the rear operations annex.

Source Document: FM 101-5, Figure H-1.

Satisfaction Source: Rear operations and COA data base files.

5.5.1.1.16.4 Prepare Rear Operations Overlay

<u>Description</u>: Users require the capability to prepare rear operations overlays.

Source Document: FM 101-5, Figure H-1.

Satisfaction Source: Rear operations and COA data base files.

5.5.1.1.17 Prepare Service Support Input

<u>Description</u>: Service support input is prepared by requesting and receiving information from the G4/S4, G1/S1, and combat service support (CSS) sources, and preparing the service support annexes and overlays. Service support staff users require a decision support capability to help them develop the service support annex and overlays to an OPLAN/OPORD. The annex and overlays integrate the results of medical, personnel, logistics, and transportation planning, and transmits detailed and specific support requirements to operators.

Source Documents: MCS UFD, Section 3.2.1.2.1.3; STACCS UFD, Section 3.2.2.14.3.1.

Satisfaction Source: Service support and COA data base files.

5.5.1.1.17.1 Request Service Support Input

<u>Description</u>: Users require the capability to request service support input from the G4/S4, G1/S1, and CSS sources.

Source Document: MCS UFD, Section 3.2.1.2.1.3.1.

Satisfaction Source: Service support and COA data base files.

5.5.1.1.17.2 Receive Service Support Input

<u>Description</u>: Users require the capability to receive service support input from the G4/S4, G1/S1, and CSS sources.

Source Document: MCS UFD, Section 3.2.1.2.1.3.2.

Satisfaction Source: Service support and COA data base files.

5.5.1.1.17.3 Prepare Service Support Annexes

Description: Users require the capability to prepare the service support annex.

Source Document: MCS UFD, Section 3.2.1.2.1.3.3.

Satisfaction Source: Service support and COA data base files.

5.5.1.1.17.4 Prepare Service Support Overlays

<u>Description</u>: Users require the capability to prepare service support overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.3.4.

Satisfaction Source: Service support and COA data base files.

5.5.1.1.18 Prepare Highway Regulation Input

<u>Description</u>: Users require the capability to prepare movement control input by requesting and receiving information from the G3/S3 (Plans), and preparing the highway regulation annex and overlay.

Source Document: MCS UFD, Section 3.2.1.2.1.18.

Satisfaction Source: Highway regulation and COA data base files.

5.5.1.1.18.1 Request Highway Regulation Input

<u>Description</u>: Users require the capability to request highway regulation input from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.18.1.

Satisfaction Source: Highway regulation and COA data base files.

5.5.1.1.18.2 Receive Highway Regulation Input

<u>Description</u>: Users require the capability to receive highway regulation input from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.18.2.

Satisfaction Source: Highway regulation and COA data base files.

5.5.1.1.18.3 Prepare Highway Regulation Annex

Description: Users require the capability to prepare the highway regulation annex.

Source Document: MCS UFD, Section 3.2.1.2.1.18.3.

Satisfaction Source: Highway regulation and COA data base files.

5.5.1.1.18.4 Prepare Highway Regulation Overlay

<u>Description</u>: Users require the capability to prepare the highway regulation overlay.

Source Document: MCS UFD, Section 3.2.1.2.1.18.4.

Satisfaction Source: Highway regulation and COA data base files.

5.5.1.1.19 Prepare Civil-Affairs Input

Description: Civil-affairs input to the plan is prepared by requesting and receiving information from the G5/S5, and preparing the civil-affairs annex and overlays. Civil-affairs staff users require an automation-supported capability to develop and finalize the civil affairs annex and overlays to OPLANs and OPORDs. Users will be able to prepare annexes following the five-paragraph field order format (unless otherwise specified), and be able to view the OPLAN/OPORD in a window on the screen while preparing the supporting annex and overlays. Users will also be able to transmit draft annexes and overlays to other users for coordination, to prepare final annexes and overlays, and to send completed annexes and overlays to operations staffs for attachment to the OPLAN/OPORD, or to other users as required.

Source Documents: MCS UFD, Section 3.2.1.2.1.1; STACCS UFD, Section 3.2.2.14.3.11.

Satisfaction Source: Civil-affairs and COA data base files.

5.5.1.1.19.1 Request Civil-Affairs Input

<u>Description</u>: Users require the capability to request civil-affairs input from the G5/S5.

Source Document: MCS UFD, Section 3.2.1.2.1.1.1.

Satisfaction Source: Civil-affairs and COA data base files.

5.5.1.1.19.2 Receive Civil-Affairs Input

<u>Description</u>: Users require the capability to receive civil-affairs input from the G5/S5.

Source Document: MCS UFD, Section 3.2.1.2.1.1.2.

Satisfaction Source: Civil-affairs and COA data base files.

5.5.1.1.19.3 Prepare Civil-Affairs Annex

<u>Description</u>: Users require the capability to prepare the civil-affairs annex.

Source Document: MCS UFD, Section 3.2.1.2.1.1.3.

Satisfaction Source: Civil-affairs and COA data base files.

5.5.1.1.19.4 Prepare Civil Affairs Overlay

<u>Description</u>: Users require the capability to prepare the civil-affairs overlay to the plan.

Source Document: MCS UFD, Section 3.2.1.2.1.1.4.

Satisfaction Source: Civil-affairs and COA data base files.

5.5.1.1.20 Prepare ROE Input

<u>Description</u>: Users require the capability to prepare ROE input by requesting information from the G3/S3 (Plans) and staff judge advocate (SJA), and preparing the ROE annex.

Source Document: MCS UFD, Section 3.2.1.2.1.21.

Satisfaction Source: ROE, SJA, and COA data base files.

5.5.1.1.20.1 Request ROE Input

Description: Users require the capability to request ROE input from the G3/S3 (Plans) and SJA.

Source Document: MCS UFD, Section 3.2.1.2.1.21.1.

Satisfaction Source: ROE, SJA, and COA data base files.

5.5.1.1.20.2 Receive ROE Input

Description: Users require the capability to receive ROE input from the G3/S3 (Plans) and SJA.

Source Document: MCS UFD, Section 3.2.1.2.1.21.2.

Satisfaction Source: ROE, SJA, and COA data base files.

5.5.1.1.20.3 Prepare ROE Annex

Description: Users require the capability to prepare the ROE annex.

Source Document: MCS UFD, Section 3.2.1.2.1.21.3.

Satisfaction Source: ROE, SJA, and COA data base files.

5.5.1.1.21 Prepare Lodgment Operations Input

<u>Description</u>: Users require the capability to prepare lodgment operations input by requesting information from the G4/S4 and CSS sources, and preparing the lodgment annex and overlay.

Source Document: MCS UFD, Section 3.2.1.2.1.20.

Satisfaction Source: Lodgement operations and COA data base files.

5.5.1.1.21.1 Request Lodgment Operations Input

<u>Description</u>: Users require the capability to request lodgment operations input from the G4/S4 and CSS sources.

Source Document: MCS UFD, Section 3.2.1.2.1.20.1.

Satisfaction Source: Lodgement operations and COA data base files.

5.5.1.1.21.2 Receive Lodgment Operations Input

<u>Description</u>: Users require the capability to receive lodgment operations input from the G4/S4 and CSS sources.

Source Document: MCS UFD, Section 3.2.1.2.1.20.2.

Satisfaction Source: Lodgement operations and COA data base files.

5.5.1.1.21.3 Prepare Lodgment Operations Annex

<u>Description</u>: Users require the capability to prepare the lodgment operations annex.

Source Document: MCS UFD, Section 3.2.1.2.1.20.3.

Satisfaction Source: Lodgement operations and COA data base files.

5.5.1.1.21.4 Prepare Lodgement Operations Overlay

<u>Description</u>: Users require the capability to prepare lodgement operations overlays.

Source Document: MCS UFD, Section 3.2.1.2.1.20.

Satisfaction Source: Lodgement operations and COA data base files.

5.5.1.1.22 Prepare Air Movement Input

Description: Users require the capability to prepare air movement input by requesting and receiving information from the G3/S3, and preparing the air movement annex and overlay.

Source Document: MCS UFD, Section 3.2.1.2.1.19.

Satisfaction Source: Air movement and COA data base files.

5.5.1.1.22.1 Request Air Movement Input

G3/S3.

Description: Users require the capability to request air movement input is requested from the

Source Document: MCS UFD, Section 3.2.1.2.1.19.1.

Satisfaction Source: Air movement and COA data base files.

5.5.1.1.22.2 Receive Air Movement Input

Description: Users require the capability to receive air movement input from the G3/S3.

Source Document: MCS UFD, Section 3.2.1.2.1.19.2.

Satisfaction Source: Air movement and COA data base files.

5.5.1.1.22.3 Prepare Air Movement Annex

<u>Description</u>: Users require the capability to prepare the air movement annex.

Source Document: MCS UFD, Section 3.2.1.2.1.19.3.

Satisfaction Source: Air movement and COA data base files.

5.5.1.1.22.4 Prepare Air Movement Overlay

<u>Description</u>: Users require the capability to prepare the air movement overlay.

Source Document: MCS UFD, Section 3.2.1.2.1.19.4.

Satisfaction Source: Air movement and COA data base files.

5.5.1.2 Compile the OPLAN

<u>Description</u>: The OPLAN is compiled by merging the sub-elements such as the task organization; situation, mission, execution, service support, and command and signal paragraphs; annexes and overlays; and assignment of force level control designation. The operations staff user requires an automated capability to prepare the OPLAN or OPORD in five-paragraph or JOPES format, including the basic plan, all required annexes and appendices, and other administrative documents required for submission and distribution.

Source Documents: MCS UFD, Section 3.2.1.2.1.22; STACCS UFD, Section 3.2.2.14.5; FBCB2 UFD, Sections 3.4.7.7.1 & 3.4.7.8.1.

Satisfaction Source: Restated mission and all functional area data base files.

5.5.1.2.1 Compile/Develop the Force Task Organization

<u>Description</u>: Users require the capability to compile the OPLAN task organization through preparation of graphical and textual task organization information requested and received from the G3/S3 (Plans).

Source Document: MCS UFD, Section 3.2.1.2.1.22.1.

Satisfaction Source: Task organization data base files.

5.5.1.2.2 Compile/Develop the Situation Paragraph

<u>Description</u>: Users require the capability to compile the current situation paragraph from available information and sources. Components are the enemy situation, friendly situation, and attachments and detachments paragraphs.

Source Document: MCS UFD, Section 3.2.1.2.1.22.2.

<u>Satisfaction Source</u>: Enemy situation, friendly situation, and extracted planning information data base files.

5.5.1.2.3 Compile/Develop the Mission Paragraph

<u>Description</u>: Users require the capability to compile the mission paragraph from the restated mission statement developed during the course of action development and analysis process.

Source Document: MCS UFD, Section 3.2.1.2.1.22.3.

Satisfaction Source: Restated mission data base files.

5.5.1.2.4 Compile/Develop the Execution Paragraph

<u>Description</u>: Users require the capability to compile the execution paragraph from information developed during the course of action development and analysis process. Components are the commander's intent, concept of the operation, fire support, air defense, engineer support, NBC, and coordinating instructions paragraphs.

Source Document: MCS UFD, Section 3.2.1.2.1.22.4.

<u>Satisfaction Source</u>: Commander's intent, COA, fire support, air defense, engineer, and NBC Information data base files.

5.5.1.2.5 Compile/Develop the Service Support Paragraph

<u>Description</u>: Users require the capability to compile the service support paragraph from information developed during the course of action development and analysis process. Components are the service support (general), material and services, and civil-military operations (CMO) paragraphs.

Source Document: MCS UFD, Section 3.2.1.2.1.22.5.

Satisfaction Source: Service support, COA, and CMO data base files.

5.5.1.2.6 Compile/Develop the Command and Signal Paragraph

<u>Description</u>: Users require the capability to compile the command and signal paragraph from information developed during the course of action development and analysis process. Components are the command and the signal paragraphs.

Source Document: MCS UFD, Section 3.2.1.2.1.22.6.

Satisfaction Source: Signal and COA data base files.

5.5.1.2.7 Incorporate OPLAN Annexes

<u>Description</u>: Users require the capability to incorporate OPLAN annexes into the OPLAN.

Source Document: MCS UFD, Section 3.2.1.2.1.22.7.

Satisfaction Source: Functional area annex data base files.

5.5.1.2.8 Incorporate OPLAN Overlays

Description: Users require the capability to incorporate OPLAN overlays into the OPLAN.

Source Document: MCS UFD, Section 3.2.1.2.1.22.8.

Satisfaction Source: Functional area overlay data base files.

5.5.1.2.9 Assign a Designation to the OPLAN

Description: Users require an automated capability to assign a unique designation to OPLANs.

Source Document: MCS UFD, Section 3.2.1.2.1.22.9.

Satisfaction Source: System generated.

5.5.1.3 Approve the OPLAN

<u>Description</u>: Users require the capability to approve the OPLAN through briefing the OPLAN to the commander and receiving his approval.

Source Document: MCS UFD, Section 3.2.1.2.1.23.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.3.1 Brief the OPLAN

<u>Description</u>: Users require the capability to brief the OPLAN to the commander.

Source Document: MCS UFD, Section 3.2.1.2.1.23.1.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.3.2 Receive Commander's OPLAN Approval

Description: Users require the capability to receive the commander's approval of the OPLAN.

Source Document: MCS UFD, Section 3.2.1.2.1.23.2.

Satisfaction Source: Commander.

5.5.1.4 Store the OPLAN

<u>Description</u>: Users require the capability to electronically store the OPLAN for future retrieval, manipulation, and archival.

Source Documents: MCS UFD, Section 3.2.1.2.1.24; FBCB2 UFD, Sections 3.4.7.7.4 & 3.4.7.8.4.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.5 Distribute the OPLAN

<u>Description</u>: The force commander and his staff will be able to use the ABCS to provide operational direction to the fighting force. The OPLAN is distributed through issuance and receipt of acknowledgments from recipients. Operations staff users require an automated capability to transmit orders and plans to subordinate, supporting, or attached units for execution, and to adjacent and higher units for coordination. Users will be able to send OPORDs and OPLANs to higher, subordinate, and adjacent commanders, other services and agencies, and to U.S. liaison elements located with allied/coalition forces.

Source Documents: MCS UFD, Section 3.2.1.2.1.25; STACCS UFD, Sections 3.2.2.14.1 & 3.2.2.14.6; AGCCS SSS, Section 3.2.1.4.9.2; FBCB2 UFD, Sections 3.4.7.7.9 & 3.4.7.8.9.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.5.1 Issue the OPLAN

<u>Description</u>: Users require the capability to issue the OPLAN to the staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission.

Source Document: MCS UFD, Section 3.2.1.2.1.25.1.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.5.2 Receive OPLAN Acknowledgment

<u>Description</u>: Users require the capability to receive acknowledgment of OPLAN receipt from all recipients.

Source Document: MCS UFD, Section 3.2.1.2.1.25.2.

Satisfaction Source: OPLAN/OPORD recipients.

5.5.1.6 Print the OPLAN/OPORD

<u>Description</u>: Users require the capability to print the OPLAN/OPORD using available hardware and software.

Source Documents: MCS UFD, Section 3.2.1.2.1.26; FBCB2 UFD, Sections 3.4.7.7.7 & 3.4.7.8.7.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.7 Display the OPLAN/OPORD

<u>Description</u>: Users require the capability to display the OPLAN/OPORD in a usable, doctrinally correct format.

Source Documents: MCS UFD, Section 3.2.1.2.1.27; FBCB2 Sections 3.4.7.7.6 & 3.4.7.8.6.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.8 Select an OPLAN

<u>Description</u>: Users require the capability to support home station contingency planning activities through force-level information processing that supports the Army planning process (military decision-making process), resulting in OPLANs. Contingency Plans (OPLANS) are used as the basis for the OPORD that will be executed during deployment, entry operations and decisive operations. Frequently a different plan is developed for each phase of the operation. The OPLAN development process remains the same regardless of the operation being planned. OPLANs are under continuous review and revision across a number of echelons until the mission is

executed or canceled. Users require the capability to access stored OPLANs/OPORDs, select one or more for display or modification, or select one to create a new OPLAN/OPORD.

Source Document: MCS UFD, Sections 2.4.7.2.1.2 & 3.2.1.2.1.28.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.8.1 Access a Stored OPLAN/OPORD

<u>Description</u>: Users require the capability to access electronically stored OPLANs/OPORDs.

Source Document: MCS UFD, Section 3.2.1.2.1.28.1.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.8.2 Select an OPLAN/OPORD

<u>Description</u>: Users require the capability to electronically select an OPLAN/OPORD.

Source Document: MCS UFD, Section 3.2.1.2.1.28.2.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.9 Prepare the OPORD

<u>Description</u>: Users require the capability to prepare the OPORD from an OPLAN by eliminating assumptions, adding real times, and modifying, as necessary, to reflect the current situation. The operations staff user requires an automated capability to prepare the OPORD in five-paragraph or JOPES format, including the basic plan, all required annexes and appendices, and other administrative documents required for submission and distribution.

Source Documents: MCS UFD, Section 3.2.1.2.1.29; STACCS UFD, Section 3.2.2.14.5.

Satisfaction Source: All functional area data base files

5.5.1.9.1 Eliminate OPLAN Assumptions

Description: Users require the capability to delete assumptions from the body of the OPLAN.

Source Document: MCS UFD, Section 3.2.1.2.1.29.1.

Satisfaction Source: All functional area data base files.

5.5.1.9.2 Input Real Times to the OPLAN

Description: Users require the capability to add real times to the OPLAN, as appropriate.

Source Document: MCS UFD, Section 3.2.1.2.1.29.2.

Satisfaction Source: All functional area data base files.

5.5.1.9.3 Modify the OPLAN

<u>Description</u>: Users require the capability to modify the OPLAN, as necessary, to reflect the current situation.

Source Documents: MCS UFD, Section 3.2.1.2.1.29.3; FBCB2 UFD, Sections 3.4.7.7.3 & 3.4.7.8.3.

Satisfaction Source: All functional area data base files.

5.5.1.10 Approve the OPORD

<u>Description</u>: Users require the capability to approve the OPORD through briefing the OPORD to the commander and receiving his approval.

Source Document: MCS UFD, Section 3.2.1.2.1.30.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.10.1 Brief the OPORD

<u>Description</u>: Users require the capability to brief the OPORD to the commander.

Source Document: MCS UFD, Section 3.2.1.2.1.30.1.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.10.2 Receive Commander's OPORD Approval

<u>Description</u>: Users require the capability to receive the commander's approval of the OPORD.

Source Document: MCS UFD, Section 3.2.1.2.1.30.2.

Satisfaction Source: Commander.

5.5.1.11 Issue the OPORD

<u>Description</u>: Users require the capability to issue the OPORD through distribution and informing of elements involved with, or affected by, the execution of the mission. Operations staff users require an automated capability to transmit orders and plans to subordinate, supporting, or attached units for execution, and to adjacent and higher units for coordination.

Source Documents: MCS UFD, Section 3.2.1.2.1.31; STACCS UFD, Section 3.2.2.14.6.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.11.1 Distribute the OPORD

<u>Description</u>: Users require the capability to distribute the OPORD through issuance and receipt of acknowledgments from recipients. Users will be able to send OPORDs to higher, subordinate, and adjacent commanders, other services and agencies, and to U.S. liaison elements located with allied/coalition forces.

Source Documents: MCS UFD, Section 3.2.1.2.1.31.1; AGCCS SSS, Section 3.2.1.4.9.2; FBCB2 Sections 3.4.7.7.9 & 3.4.7.8.9.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.11.1.1 Inform Higher Headquarters of the New OPORD

<u>Description</u>: Users require the capability to inform higher headquarters of the new OPORD and issued a copy.

Source Document: MCS UFD, Section 3.2.1.2.1.31.1.1.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.11.1.2 Inform Adjacent Headquarters of the New OPORD

<u>Description</u>: Users require the capability to inform adjacent headquarter of the new OPORD and issued copies.

Source Document: MCS UFD, Section 3.2.1.2.1.31.1.2.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.11.1.3 Issue the New OPLAN/OPORD

<u>Description</u>: Users require the capability to issue the new OPORD to the staff and subordinate elements, plus any others involved in the execution of the mission.

Source Document: MCS UFD, Section 3.2.1.2.1.31.1.3.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.11.2 Receive OPORD Acknowledgment

<u>Description</u>: Users require the capability to receive acknowledgment of OPORD receipt from all recipients.

Source Document: MCS UFD, Section 3.2.1.2.1.31.2.

Satisfaction Source: OPORD recipients.

5.5.1.12 Store the OPORD

<u>Description</u>: Users require the capability to electronically store the OPORD for future retrieval, manipulation, and archival.

Source Documents: MCS UFD, Section 3.2.1.2.1.32; FBCB2 Sections 3.4.7.7.4 & 3.4.7.8.4.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.1.13 Delete an OPLAN/OPORD

Description: Users require the capability of deleting an OPLAN/OPORD from storage media.

Source Document: FBCB2 UFD, Sections 3.4.7.7.5 & 3.4.7.8.5.

Satisfaction Source: OPLAN/OPORD data base files.

5.5.2 Prepare/Issue an Oral Order

<u>Description</u>: Users require the capability to prepare and issue oral orders, as necessary, to accomplish the mission or to initiate planning. Oral orders are normally issued prior to preparation of written orders. Issuing an oral order will generally lead to the issuing of a FRAGO.

Source Document: MCS UFD, Section 3.2.1.

Satisfaction Source: All functional area and COA data base files.

5.5.3 Prepare/Issue a FRAGO

Description: Users require the capability to prepare and issue a FRAGO.

Source Documents: MCS UFD, Section 3.2.1.3.1.2; FBCB2 Section 3.4.7.

Satisfaction Source: COA and all functional area data base files.

5.5.3.1 Prepare Change in the Situation Paragraph

Description: Users require the capability to prepare the situation paragraph for a FRAGO. Users

require the capability to automatically initialize the situation paragraph with the OPORD's, or most recent active

FRAGO's, situation paragraph for the operator to review and modify with current information.

Source Document: MCS UFD, Section 3.2.1.3.1.2.1.

Satisfaction Source: Enemy situation, friendly situation, and task organization data base files.

5.5.3.2 Prepare Change in the Force Mission Paragraph

Description: Users require the capability to prepare the mission paragraph for a FRAGO. Users

require the capability to automatically initialize the mission paragraph with the OPORD's, or most recent active

FRAGO's, mission paragraph for the operator to review and modify with current information.

Source Document: MCS UFD, Section 3.2.1.3.1.2.2.

Satisfaction Source: Restated mission data base files.

5.5.3.3 Prepare Change in the Commander's Intent Paragraph

Description: Users require the capability to prepare the commander's intent paragraph for a

FRAGO. Users require the capability to automatically initialize the commander's intent paragraph with the OPORD's,

or most recent active FRAGO's, commander's intent paragraph for the operator to review and modify with current

information.

Source Document: MCS UFD, Section 3.2.1.3.1.2.3.

Satisfaction Source: Commander's planning guidance data base files.

5-47

5.5.3.4 Prepare Change in the Concept of the Operation Paragraph

<u>Description</u>: Users require the capability to prepare the concept of the operation paragraph for a FRAGO. Users require the capability to automatically initialize the concept of the operation paragraph with the OPORD's, or most recent active FRAGO's, concept of the operation paragraph for the operator to review and modify with current information.

Source Document: MCS UFD, Section 3.2.1.3.1.2.4.

Satisfaction Source: COA data base files.

5.5.3.5 Prepare Change to the Force Task Organization

<u>Description</u>: Users require the capability to modify the current force task organization graphically and/or textually for the FRAGO. The capability will require the operator to input an effective time for the change to the task organization. Users require the capability to display the current task organization, the modified task organization, and/or the modified task organization with changes for the current task organization highlighted graphically or textually.

Source Document: MCS UFD, Section 3.2.1.3.1.2.5.

Satisfaction Source: Task organization data base files.

5.5.3.6 Prepare New Force Taskings

<u>Description</u>: Users require the capability to develop force taskings for the FRAGO.

Source Document: MCS UFD, Section 3.2.1.3.1.2.6.

Satisfaction Source: COA data base files.

5.5.3.7 Prepare Change in Control Measures

<u>Description</u>: Users require the capability to modify the control measures overlay. Users require the capability to display the current control measures for modification. Users require the capability to link any

modifications to the FRAGO. Users require the capability to display the unmodified control measures overlay, the modified control measures overlay, or the modified control measure overlay with the changes highlighted.

Source Document: MCS UFD, Section 3.2.1.3.1.2.7.

Satisfaction Source: COA and risk analysis data base files.

5.5.3.8 Compile the FRAGO

<u>Description</u>: Users require the capability to consolidate the separately developed segments into a FRAGO.

Source Documents: MCS UFD, Section 3.2.1.3.1.2.8; FBCB2 Sections 3.4.7.7.1 & 3.4.7.8.1.

Satisfaction Source: COA and all functional area data base files.

5.5.3.9 Assign a Designation to the FRAGO

<u>Description</u>: Users require the capability to track the OPORD number and appended FRAGO numbers, assigning as a default the next FRAGO number in sequence. FRAGO designation will consist of OPORD number, FRAGO number, and issuing headquarters.

Source Document: MCS UFD, Section 3.2.1.3.1.2.9.

Satisfaction Source: System generated.

5.5.3.10 Approve the FRAGO

<u>Description</u>: Users require the capability to place in the signature block, the commander's last name and rank. Under the heading of Official, users require the capability of being prompted to enter the name of the approving authority, defaulting to the last name entered. Users require the capability to send and receive unapproved FRAGOs. Users require the capability to assist the operator in preparing and presenting a FRAGO briefing. Users require the capability to provide commanders or, their designee, the capability of approving a FRAGO remotely.

Source Document: MCS UFD, Section 3.2.1.3.1.2.10.

Satisfaction Source: FRAGO data base files.

5.5.3.10.1 Brief the FRAGO

<u>Description</u>: Users require the capability to send and receive unapproved FRAGOs. Users require the capability to prepare and present a FRAGO briefing. Users require the capability to provide the commander, or their designee, the capability of approving FRAGOs remotely.

Source Document: MCS UFD, Section 3.2.1.3.1.2.10.1.

Satisfaction Source: FRAGO data base files.

5.5.3.10.2 Receive Commander 's FRAGO Approval

<u>Description</u>: Users require the capability to provide commanders, or their designee, the capability of approving a FRAGO remotely.

Source Document: MCS UFD, Section 3.2.1.3.1.2.10.2.

Satisfaction Source: Commander.

5.5.3.11 Inform Higher Headquarters of the FRAGO

<u>Description</u>: Users require the capability to send FRAGOs to the higher headquarters.

Source Document: MCS UFD, Section 3.2.1.3.1.2.11.

Satisfaction Source: FRAGO data base files.

5.5.3.12 Inform Adjacent Headquarters of the FRAGO

Description: Users require the capability to send FRAGOs to adjacent units' headquarters.

Source Document: MCS UFD, Section 3.2.1.3.1.2.12.

Satisfaction Source: FRAGO data base files.

5.5.3.13 Issue FRAGOs

<u>Description</u>: Users require the capability to send FRAGOs to subordinate units. Users will also be able to send FRAGOs to higher and adjacent commanders, other services and agencies, and to U.S. liaison elements located with allied/coalition forces.

Source Documents: MCS UFD, Section 3.2.1.3.1.2.13; AGCCS SSS, Section 3.2.1.4.9.2; FBCB2 Sections 3.4.7.7.9 & 3.4.7.8.9.

Satisfaction Source: FRAGO data base files.

5.5.3.14 Store FRAGOs

<u>Description</u>: Users require the capability to store FRAGOs internally and/or on removable storage media.

Source Documents: MCS UFD, Section 3.2.1.3.1.2.14; FBCB2 UFD, Sections 3.4.7.7.4 &

Satisfaction Source: FRAGO data base files.

5.5.3.15 Print FRAGOs

3.4.7.8.4.

3.4.7.8.7.

<u>Description</u>: Users require the capability to print FRAGOs.

Source Documents: MCS UFD, Section 3.2.1.3.1.2.15; FBCB2 UFD, Sections 3.4.7.7.7 &

Satisfaction Source: FRAGO data base files.

5.5.3.16 Display FRAGOs

<u>Description</u>: Users require the capability to display a FRAGO in a usable, doctrinally-correct format.

Source Documents: MCS UFD, Section 3.2.1.3.1.2.16; FBCB2 Sections 3.4.7.7.6 & 3.4.7.8.6.

Satisfaction Source: FRAGO data base files.

5.5.3.17 Develop a FRAGO Summary List

<u>Description</u>: Users require the capability to develop a FRAGO summary list that incorporates higher headquarter's summary list information and own FRAGO information. FRAGO information will consist of FRAGO designation, FRAGO issue date-time-group (DTG), FRAGO effective DTG, and a brief FRAGO description.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.

Satisfaction Source: FRAGO data base files.

5.5.3.17.1 Receive a FRAGO Summary List

<u>Description</u>: Users require the capability to receive a FRAGO summary list from the higher headquarters.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.1.

Satisfaction Source: Higher headquarters.

5.5.3.17.2 Prepare a FRAGO Summary

<u>Description</u>: Users require the capability to prepare a FRAGO summary consisting of FRAGO designation, FRAGO issue DTG, FRAGO effective DTG, and a brief FRAGO description.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.2.

Satisfaction Source: FRAGO data base files.

5.5.3.17.3 Modify a FRAGO Summary

Description: Users require the capability to modify a FRAGO summary.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.

Satisfaction Source: FRAGO data base files.

5.5.3.17.4 Store a FRAGO Summary

Description: Users require the capability to append the new FRAGO summary to the stored

FRAGO list.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.3.

Satisfaction Source: FRAGO data base files.

5.5.3.17.5 Print the FRAGO Summary List

Description: Users require the capability to print the FRAGO summary list.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.4.

Satisfaction Source: FRAGO data base files.

5.5.3.17.6 Delete a FRAGO Summary

<u>Description</u>: Users require the capability to search the FRAGO list and identify a FRAGO summary to be deleted. Users require the capability to delete user identified FRAGO summaries from the FRAGO summary list.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.5.

Satisfaction Source: FRAGO data base files.

5.5.3.17.7 Display the FRAGO Summary List

<u>Description</u>: Users require the capability to display the FRAGO summary list in a useable format.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.6.

Satisfaction Source: FRAGO data base files.

5.5.3.17.8 Distribute the FRAGO Summary List

<u>Description</u>: Users require the capability to automatically distribute the FRAGO summary list, or an update to the FRAGO summary list, to subordinate units and other staff sections.

Source Document: MCS UFD, Section 3.2.1.3.1.2.17.7.

Satisfaction Source: FRAGO data base files.

5.5.3.18 Delete a FRAGO

<u>Description</u>: Users require the capability to delete a FRAGO from storage media.

Source Documents: MCS UFD, Section 3.2.1.3.1.2.18; FBCB2 Sections 3.4.7.7.5 & 3.4.7.8.5.

Satisfaction Source: FRAGO data base files.

5.5.4 Prepare/Issue a Free-Text Order

<u>Description</u>: Users require the capability to prepare and issue free-text orders when doctrinal formats do not meet situational requirements.

Source Document: MCS UFD, Section 3.2.1.2.3

Satisfaction Source: All functional area and COA data base files.

5.5.4.1 Create the Free-Text Order

<u>Description</u>: Users require the capability to prepare the free-text order.

Source Document: MCS UFD, Section 3.2.1.2.3.1

Satisfaction Source: All functional area and COA data base files.

5.5.4.2 Issue the Free-Text Order

<u>Description</u>: Users require the capability to issue the free-text order through distribution and acknowledgment of receipt from recipients.

Source Document: MCS UFD, Section 3.2.1.2.3.2

Satisfaction Source: Free-Text order recipients.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 6

TERRAIN EVALUATION FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the terrain evaluation common user requirements.

6.1 FUNCTION NAME

Terrain Evaluation

6.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to conduct terrain analysis.

6.3 FUNCTION DESCRIPTION

The Terrain Evaluation common function supports commanders and staffs (combat, combat support, and combat service support) in analyzing terrain during intelligence preparation of the battlefield (IPB). (See the Enemy Situation common function). This function also supports the COA Development and Analysis common function. It supports the user in analyzing the nature and characteristics of terrain in the areas of operations and interest. Using this function, users will be able to determine the types and scale of operations that the area will support. The function also will assist in determining the impacts of all types of terrain features and hazards on the conduct of both friendly and enemy operations. These features and hazards include the factors of OCOKA (obstacles, cover and concealment, observation and fields of fire, key terrain, and avenues of approach), lines of communication, movement routes, and communications line-of-sight. The function will help users analyze man-made alterations to the area, such as NBC contamination, that create significant hazards. This capability will be able to determine intervisibility such as optical line-of-sight (LOS), system siting, and weapons fans. The function will assist the user in creating terrain overlays. It will facilitate battle command by automating terrain analysis throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Assemble terrain information.
- Analyze the terrain in relation to the factors of OCOKA.
- Analyze area lines of communications.
- Perform weapons line-of-sight (LOS) analysis.
- Determine the impacts of the terrain on friendly and enemy operations.
- Develop sixteen types of terrain overlays.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute terrain analysis data.

6.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Section 3.2.1.4.21
- Maneuver Control System (MCS) User Functional Description (UFD), Section 3.2.1.1.5.2
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.2.19
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.3.

6.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 6-1 depicts the hierarchy of the user functional requirements.

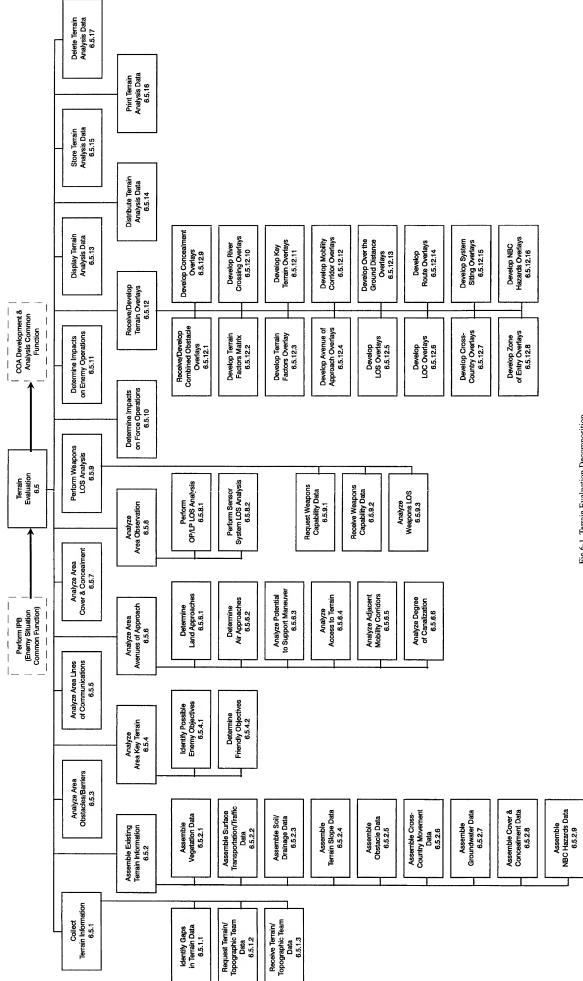


Fig 6-1 Terrain Evaluation Decomposition

6.5.1 Collect Terrain Information

<u>Description</u>: Users require the capability to collect terrain information through identification of gaps in terrain data and acquisition of terrain and topographical data.

Source Document: MCS UFD, Section 3.2.1.1.5.2.1.

Satisfaction Source: Terrain data base files.

6.5.1.1 Identify Gaps in Terrain Data

<u>Description</u>: Users require the capability to compare terrain product requirements with available information to identify gaps. Sources include standard topographic maps, intelligence estimates and area analyses from higher headquarters, special terrain studies, special maps, charts, geodetic studies, photography, and actual terrain reconnaissance.

Source Document: MCS UFD, Section 3.2.1.1.5.2.1.1.

<u>Satisfaction Source</u>: Standard topographic maps, intelligence estimates and area analyses from higher headquarters, special terrain studies, special maps, charts, geodetic studies, photography, and actual terrain reconnaissance

6.5.1.2 Request Terrain/Topographic Team Data

<u>Description</u>: Users require the capability to request terrain analysis support from terrain/topographic teams in the form of terrain/topographic data.

Source Document: MCS UFD, Section 3.2.1.1.5.2.1.2.

Satisfaction Source: Topographic team.

6.5.1.3 Receive Terrain/Topographic Team Data

<u>Description</u>: Users require the capability to receive terrain/topographic data from the terrain/topographic teams in a usable format.

Source Documents: MCS UFD, Section 3.2.1.1.5.2.1.3; FBCB2 UFD, Sections 3.4.3.7.2 &

3.4.3.8.2.

Satisfaction Source: Topographic team.

Assemble Existing Terrain Information 6.5.2

Description: Users require the capability to assemble all existing terrain information, consisting

of data on vegetation, surface transportation and traffic density, soil and drainage, terrain slope, obstacles,

cross-country movement, groundwater, cover/concealment, and NBC hazards.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.

Satisfaction Source: Terrain and NBC data base files.

Assemble Vegetation Data 6.5.2.1

Description: Users require the capability to assemble vegetation data consisting of types of

vegetation, seasonal impacts, tree spacing and stem diameters, canopy closure, and density and height of ground

vegetation.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.1.

Satisfaction Source: Terrain data base files.

Assemble Surface Transportation/Traffic Data 6.5.2.2

Description: Users require the capability to assemble surface transportation/traffic data consisting

of road networks, road surfaces, rail networks, pipelines, transloading facilities, airfields, communications centers,

canals and waterways, power generation facilities, and built-up areas.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.2.

Satisfaction Source: Terrain data base files.

6-5

6.5.2.3 Assemble Soil/Drainage Data

<u>Description</u>: Users require the capability to assemble soil/drainage data consisting of stream width, depth, velocity, bank height, and river bed composition, soil characteristics limiting mobility, marshlands, and bogs.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.3.

Satisfaction Source: Terrain data base files.

6.5.2.4 Assemble Terrain Slope Data

<u>Description</u>: Users require the capability to assemble terrain slope data consisting of slope and other surface conditions impeding cross-country movement, and slope gradients.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.4.

Satisfaction Source: Terrain data base files.

6.5.2.5 Assemble Obstacle Data

<u>Description</u>: Users require the capability to assemble obstacle data consisting of locations and types of existing and planned friendly, and enemy obstacles, and existing natural obstacles.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.5.

Satisfaction Source: Obstacle and terrain data base files.

6.5.2.6 Assemble Cross-Country Movement Data

<u>Description</u>: Users require the capability to assemble cross-country movement data consisting of all factors impeding cross-country mobility, such as weather effects on soil, drainage, and visibility.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.6.

Satisfaction Source: Terrain data base files.

6.5.2.7 Assemble Groundwater Data

<u>Description</u>: Users require the capability to assemble groundwater data consisting of locations of major bodies of water such as rivers and lakes, flooded areas, and in some cases, depth of wells and potability of water supplies.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.7.

Satisfaction Source: Terrain data base files.

6.5.2.8 Assemble Cover & Concealment Data

<u>Description</u>: Users require the capability to assemble cover/concealment data consisting of analysis of areas that may provide cover and/or concealment due to nature of vegetation, terrain, obstacles, structures, weather, and visibility.

Source Document: MCS UFD, Section 3.2.1.1.5.2.2.8.

Satisfaction Source: Terrain data base files.

6.5.2.9 Assemble NBC Hazard Data

<u>Description</u>: Users require the capability to assemble NBC hazard data consisting of current and projected areas of nuclear, biological, and chemical contamination.

Source Document: STACCS UFD, Section 3.2.2.19.

Satisfaction Source: NBC and terrain data base files.

6.5.3 Analyze Area Obstacles/Barriers

<u>Description</u>: Users require the capability to analyze area obstacles and barriers, man-made and natural, to determine restrictions to movement. Result of analysis is displayed graphically on the map. Factors bearing on the analysis include over-the-ground distances; time-of-travel predictions; and unit movement predictions.

Source Documents: MCS UFD, Section 3.2.1.1.5.3; STACCS UFD, Section 3.2.2.19.2; AGCCS SSS, Section 3.2.1.4.21.2.

Satisfaction Source: Obstacle and terrain data base files.

6.5.4 Analyze Area Key Terrain

<u>Description</u>: Users require the capability to analyze area key terrain to determine features which, in the control of a combatant, will affect the conduct of an operation. Key terrain is considered with reference to the mission and identified avenues of approach.

Source Document: MCS UFD, Section 3.2.1.1.5.2.4.

Satisfaction Source: Terrain, restated mission, and terrain analysis data base files.

6.5.4.1 Identify Possible Enemy Objective

<u>Description</u>: Users require the capability to identify possible enemy objectives through analysis of enemy disposition, composition, strength, committed forces, and application of doctrinal and situational templates.

Source Document: MCS UFD, Section 3.2.1.1.5.2.4.1.

Satisfaction Source: Terrain and enemy situation data base files.

6.5.4.2 Determine Friendly Objectives

<u>Description</u>: Users require the capability to determine friendly objective information.

Source Document: MCS UFD, Section 3.2.1.1.5.2.4.2.

Satisfaction Source: Terrain and restated mission data base files.

Analyze Area Lines of Communications (LOC) 6.5.5

Description: Users require the capability to analyze the LOCs in the area of interest and area of

operations and how they affect command, control, communications, and logistics capabilities for the proposed

operations.

Source Document: MCS UFD, Section 3.2.1.1.5.2.6.

Satisfaction Source: Terrain data base files.

Analyze Area Avenues of Approach 6.5.6

Description: Users require the capability to analyze land and air avenues of approach and their

potential for use and consequent effect on operations. Users require an automation-supported capability to assess

the nature, extent, and potential effects on the friendly OPLAN or OPORD of known constraints to ground and air

mobility caused by weather and terrain in the area of operation. Users must be able to retrieve current theater

constraint data, such as no fly zones, tunnel widths, LOC condition data, hazards to nap-of-the-earth flying, obstacles,

and bridge and highway classifications, and use these data in modelling and evaluating their impacts on planned and

current operations.

Source Documents: MCS UFD, Section 3.2.1.1.5.2.5; STACCS UFD, Section 3.2.2.19.4; AGCCS

SSS, Section 3.2.1.4.21.4.

Satisfaction Source: Terrain data base files.

Determine Land Approaches 6.5.6.1

Description: Users require the capability to analyze area land avenues of approach in terms of their

potential to support maneuver or movement, access to the terrain and adjacent avenues, degrees of canalization, cover

and concealment, observation and fields of fire, and obstacles. The result of this analysis is displayed graphically

on the avenue of approach overlay.

Source Document: MCS UFD, Section 3.2.1.1.5.2.5.1.

Satisfaction Source: Terrain data base files.

6-9

6.5.6.2 Determine Air Approaches

<u>Description</u>: Users require the capability to analyze area air avenues of approach in terms of their potential to affect ground forces. Analysis addresses low-level and nap of-the-earth approaches for aircraft to reach an objective or key terrain. Factors considered with the aviation and air liaison officers are density altitude, wind, turbulence, and visibility, as well as sufficient airspace, concealment from ground observation, recognizable terrain features, length of flight paths, and vertical obstructions.

Source Document: MCS UFD, Section 3.2.1.1.5.2.5.2.

Satisfaction Source: Terrain data base files.

6.5.6.3 Analyze Potential to Support Maneuver

<u>Description</u>: Users require the capability to analyze each avenue of approach with input from the G3/S3 in terms of its potential to support maneuver.

Source Document: MCS UFD, Section 3.2.1.1.5.2.5.3.

Satisfaction Source: Terrain data base files.

6.5.6.4 Analyze Access to Terrain

<u>Description</u>: Users require the capability to analyze each avenue of approach in terms of its access to terrain.

Source Document: MCS UFD, Section 3.2.1.1.5.2.5.4.

Satisfaction Source: Terrain data base files.

6.5.6.5 Analyze Adjacent Mobility Corridors

<u>Description</u>: Users require the capability to analyze each avenue of approach in terms of its access and positional relationship to adjacent mobility corridors.

Source Document: MCS UFD, Section 3.2.1.1.5.2.5.5.

Satisfaction Source: Terrain data base files.

6.5.6.6 Analyze Degree of Canalization

Description: Users require the capability to analyze each avenue of approach in terms of degree

of canalization.

Source Document: MCS UFD, Section 3.2.1.1.5.2.5.6.

Satisfaction Source: Terrain data base files.

6.5.7 Analyze Area Cover & Concealment

<u>Description</u>: Users require the capability to analyze the cover & concealment characteristics of the area of interest and area of operations and how they affect security, maneuver, movement, fires, and logistics

operations of friendly and enemy forces.

Source Document: MCS UFD, Section 3.2.1.1.5.2.7.

Satisfaction Source: Terrain data base files.

6.5.8 Analyze Area Observation

<u>Description</u>: Users require the capability to analyze observation characteristics within the zone of operations, including the area of interest and the area of operations, to determine capabilities of friendly and enemy observation systems, implementation guidance for friendly systems, and means to compensate for unacceptable

limitations.

Source Document: MCS UFD, Section 3.2.1.1.5.2.9.

Satisfaction Source: Terrain and weapons data base files.

6-11

6.5.8.1 Perform Observation Post (OP) / Listening Post (LP) LOS Analysis

<u>Description</u>: Users require the capability to analyze LOS capabilities for OPs and LPs to determine areas of coverage and areas of dead space.

Source Document: MCS UFD, Section 3.2.1.1.5.2.9.1.

Satisfaction Source: Terrain data base files.

6.5.8.2 Perform Sensor System LOS Analysis

<u>Description</u>: Users require the capability to analyze LOS capabilities for sensor systems to determine areas of coverage and areas of dead space.

Source Document: MCS UFD, Section 3.2.1.1.5.2.9.2.

Satisfaction Source: Terrain and weapons data base files.

6.5.9 Perform Weapons LOS Analysis

<u>Description</u>: Users require the capability to analyze weapons LOS characteristics in the area of interest and area of operations and how they affect implementation of friendly and enemy weapon systems.

Source Document: MCS UFD, Section 3.2.1.1.5.2.8.

Satisfaction Source: Terrain, enemy weapons, and friendly weapons data base files.

6.5.9.1 Request Weapons Capability Data

<u>Description</u>: Users require the capability to request weapons capability information from the weapons data base.

Source Document: MCS UFD, Section 3.2.1.1.5.2.8.

Satisfaction Source: Weapon data base files.

6.5.9.2 Receive Weapons Capability Data

<u>Description</u>: Users require the capability to receive weapons capability information from the weapons data base.

Source Document: MCS UFD, Section 3.2.1.1.5.2.8.

Satisfaction Source: Weapons data base files.

6.5.9.3 Analyze Weapons LOS

<u>Description</u>: Users require the capability to analyze LOS capabilities for weapons systems to determine areas of coverage and areas of dead space.

Source Document: MCS UFD, Section 3.2.1.1.5.2.8.

Satisfaction Source: Terrain and weapons data base files.

6.5.10 Determine Impacts on Force Operations

<u>Description</u>: Users require the capability to determine terrain effects on friendly force operations, to include advantages and disadvantages, and capabilities, limitations, and risks of COAs.

Source Document: MCS UFD, Section 3.2.1.1.5.2.10.

Satisfaction Source: Terrain analysis and COA data base files.

6.5.11 Determine Impacts on Enemy Operations

<u>Description</u>: Users require the capability to determine terrain effects on enemy operations, to include advantages and disadvantages, and capabilities, limitations, and risks of COAs.

Source Document: MCS UFD, Section 3.2.1.1.5.2.11.

Satisfaction Source: Terrain analysis and enemy situation data base files.

6.5.12 Receive/Develop Terrain Overlays

Description: Users require the capability to receive and electronically store, retrieve, develop (modify, update), distribute, and archive terrain overlays. The user will have the capability to display digital terrain data about any of the terrain features/attributes identified in the specification for Tactical Terrain Database (TTD), either as text for a point on a map, or as a SITMAP-generated overlay for the area. The terrain evaluation capability will be able to provide the following types of terrain information: transportation LOC (roads, bridges, railroad composition and capacity), hydrography (surface drainage, water bodies), elevation data, surface configuration, built-up and urban areas, political boundaries, major military and commercial installations, natural and man-made obstacles, vegetation composition and density, and ground information (including soil composition). In addition, the user will be able to create the following types of overlays: lines of communication overlays (roads, bridges, railroads, airfields, inland waterways, telecommunications lines); cross country movement overlays, zone of entry overlays (ports, LZ, DZ amphibious beaches); concealment overlays, river crossing sites overlays, key terrain overlays, avenues of approach overlays, mobility corridor/avenues of advance overlays; over the ground distance overlays, route overlays, and system siting overlays. The capability will also allow for the inclusion of weather data into development of the above terrain analysis overlays. Users will be able to perform spatial queries on the data displayed by the application. The user will be able to declutter the map display by selectively deleting topographical and/or overlay data.

Source Documents: MCS UFD, Section 3.2.1.1.5.2.12; STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.1 Receive/Develop Combined Obstacle Overlays

<u>Description</u>: Users require the capability to receive and electronically store, retrieve, develop (modify, update), distribute, and archive combined obstacle overlays.

Source Document: MCS UFD, Section 3.2.1.1.5.2.12.1

Satisfaction Source: Terrain analysis data base files.

6.5.12.2 Develop Terrain Factors Matrix

<u>Description</u>: Users require the capability to develop the terrain factors matrix.

Source Document: MCS UFD, Section 3.2.1.1.5.2.12.2.

Satisfaction Source: Terrain analysis data base files.

6.5.12.3 Develop Terrain Factors Overlay

<u>Description</u>: Users require the capability to develop the terrain factors overlay.

Source Document: MCS UFD, Section 3.2.1.1.5.2.12.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.4 Develop Avenue of Approach Overlays

<u>Description</u>: Users require the capability to develop the avenue of approach overlays.

Source Document: MCS UFD, Section 3.2.1.1.5.2.12.4.

Satisfaction Source: Terrain analysis data base files.

6.5.12.5 Develop LOS Overlays

<u>Description</u>: Users require the capability to develop LOS overlays.

Source Document: MCS UFD, Section 3.2.1.1.5.2.12.5.

Satisfaction Source: Terrain analysis data base files.

6.5.12.6 Develop LOC Overlays

<u>Description</u>: Users require the capability to develop LOC overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.7 Develop Cross-Country Overlays

<u>Description</u>: Users require the capability to develop cross-country overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.8 Develop Zone of Entry Overlays

<u>Description</u>: Users require the capability to develop zone of entry overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.9 Develop Concealment Overlays

Description: Users require the capability to develop concealment overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.10 Develop River Crossing Overlays

<u>Description</u>: Users require the capability to develop river crossing overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.11 Develop Key Terrain Overlays

<u>Description</u>: Users require the capability to develop key terrain overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.12 Develop Mobility Corridor Overlays

<u>Description</u>: Users require the capability to develop mobility corridor overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.13 Develop Over Ground Distance Overlays

<u>Description</u>: Users require the capability to develop over ground distance overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.14 Develop Route Overlays

<u>Description</u>: Users require the capability to develop route overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.15 Develop System Siting Overlays

<u>Description</u>: Users require the capability to develop system siting overlays.

Source Documents: STACCS UFD, Section 3.2.2.19.3; AGCCS SSS, Section 3.2.1.4.21.3.

Satisfaction Source: Terrain analysis data base files.

6.5.12.16 Develop NBC Hazard Overlays

<u>Description</u>: Users require the capability to develop NBC hazard overlays.

Source Documents: STACCS UFD, Section 3.2.2.19; AGCCS SSS, Section 3.2.1.4.21.

Satisfaction Source: Terrain analysis and NBC data base files.

6.5.13 Display Terrain Analysis Data

<u>Description</u>: Users require the capability to display terrain analysis in a usable format on available hardware and software.

Source Documents: MCS UFD, Section 3.2.1.1.5.2.13; FBCB2 UFD, Sections 3.4.3.7.6 & 3.4.3.8.6.

Satisfaction Source: Terrain analysis data base files.

6.5.14 Distribute Terrain Analysis Data

<u>Description</u>: Users require the capability to distribute terrain analysis information to staff and subordinate elements involved in developing the plan.

Source Documents: MCS UFD, Section 3.2.1.1.5.2.14; FBCB2 UFD, Sections 3.4.3.7.9 & 3.4.3.8.9.

Satisfaction Source: Terrain analysis data base files.

6.5.15 Store Terrain Analysis Data

<u>Description</u>: Users require the capability to store terrain analysis data internally and/or on removable storage media.

Source Document: FBCB2 UFD, Sections 3.4.3.7.4 & 3.4.3.8.4.

Satisfaction Source: Terrain analysis data base files.

6.5.16 Print Terrain Analysis Data

Description: Users require the capability to print terrain analysis data.

Source Document: FBCB2 UFD, Sections 3.4.3.7.7 & 3.4.3.8.7.

Satisfaction Source: Terrain analysis data base files.

6.5.17 Delete Terrain Analysis Data

Description: Users require the capability to delete terrain analysis data from storage media.

Source Document: FBCB2 UFD, Section 3.4.3.7.5 & 3.4.3.8.5.

Satisfaction Source: Terrain analysis data base files.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 7

SUPPLIES AND EQUIPMENT FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the supplies and equipment common user requirements.

7.1 FUNCTION NAME

Supplies and Equipment

7.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to monitor supplies and equipment.

7.3 FUNCTION DESCRIPTION

The Supplies and Equipment common function supports commanders and staffs (combat, combat support, and combat service support) in monitoring supplies and equipment. This function will help users coordinate the exchange of logistics information among users, supply units, and material management centers (MC). It will assist the user in monitoring and maintaining information about supply requirements, maintaining the stock control system, managing the direct support system, controlling requisition and material flow, and controlling combat-critical commodities. The function will also support the user in the development of COAs and plans. It will help the user formulate, distribute, and monitor logistics requirements, allocations, and redistribution plans. Using this function, the user will be able to compute requirements for force sustainment and determine supply shortfalls. This function will be able to interoperate with the Combat Service Support Control System (CSSCS) and joint and strategic command and control systems to obtain necessary logistics information. It will facilitate battle command by automating logistics functions throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Monitor command designated critical logistics items.
- Monitor pre-positioning of material configured to unit sets (POMCUS) items.
- Monitor unit basic load information.
- Monitor the status of all classes of supplies.
- Manage the logistics data base, including unit identification code (UIC) user permissions and logistics usage factors.
- Display supply information in different formats.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute supplies and equipment data.

7.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Section 3.2.1.4.2
- Maneuver Control System (MCS) User Functional Description (UFD), Section
 3.2.1.4.1.1.3
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.1.19
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.18.

7.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 7-1 depicts the hierarchy of the user functional requirements

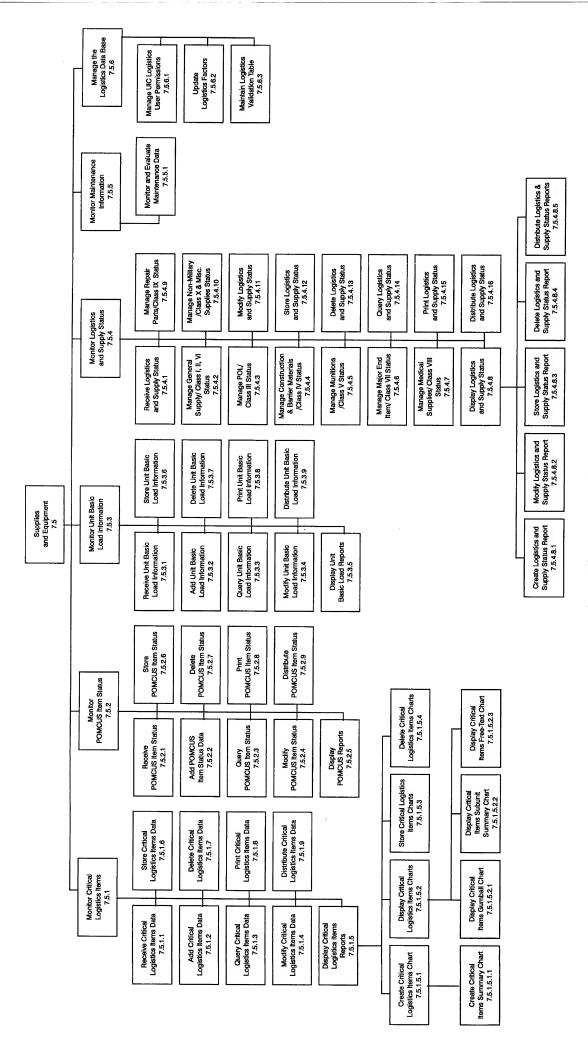


Fig 7-1 Supplies and Equipment Decomposition

7.5.1 Monitor Critical Logistics Items

Description: Users require the capability to monitor the status of logistics items that commanders consider to be critical to their operational mission. Logistics staff users will be able to monitor the status of these critical logistics items, in selected categories and all classes, by type and OPLAN. Data will include quantities (by type) received, expended, on hand, and projected for receipt. In addition to providing the total quantities of items received, expended, and on-hand for the entire force, the function will also have the capability to track where these items are located. Data from MMCs will be electronically transferable to the system and tied into the transportation data system to provide in-transit visibility of critical supplies. The user will be able to add new critical item records to the data base, query the data base to retrieve data matching certain user-specified criteria, update data, and create reports.

Source Document: STACCS UFD, Section 3.2.1.19.1.

Satisfaction Source: CSSCS and subordinate units.

7.5.1.1 Receive Critical Logistics Items Data

<u>Description</u>: Users require the capability to receive critical logistics items data from subordinate units and CSSCS. Critical logistics items data will consist of subunits' and sub-subunits' critical items information.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.3.2.1; FBCB2 UFD, Sections 3.4.18.7.2 & 3.4.18.8.2.

Satisfaction Source: CSSCS and subordinate units.

7.5.1.2 Add Critical Logistics Items Data

<u>Description</u>: Users require the capability to add new critical logistics item records to the data base. The system will automatically validate that the new critical item exists in the commander's list of items to be tracked, and that the combination of critical item identifying numbers/codes is correct. The system will also restrict data entry to only those users having write permission for a particular unit.

Source Documents: STACCS UFD, Section 3.2.1.19.1.1; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

7.5.1.3 Query Critical Logistics Items Data

<u>Description</u>: Users require the capability to query the critical logistics items data base to retrieve data matching certain user-specified criteria. The system will sort the data returned by the query by UIC. The system will also restrict users to querying only those units to which the user has been granted read access.

Source Documents: STACCS UFD, Section 3.2.1.19.1.2; FBCB2 UFD, Sections 3.4.18.7.8 & 3.4.18.8.8.

Satisfaction Source: Critical logistics items data base files.

7.5.1.4 Modify Critical Logistics Items Data

<u>Description</u>: Users require the capability to modify the critical logistics items data base with current data. The system will restrict users to modifying only the records of those units to which the user has been granted write access. Users require the capability to automatically modify unit resource status information when it is received.

Source Documents: STACCS UFD, Section 3.2.1.19.1.3; MCS UFD, Section 3.2.1.4.1.1.3.2.2; FBCB2 Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: CSSCS and subordinate units.

7.5.1.5 Display Critical Logistics Items Reports

<u>Description</u>: Users require the capability to create reports showing the status, by unit, of critical logistics items that the commander wishes to track. The user will be able to view the reports on the screen, save them to a file, print them, and transmit them to other users.

<u>Source Documents</u>: STACCS UFD, Section 3.2.1.19.1.4; MCS UFD, Section 3.2.1.4.1.1.3.2; FBCB2 Sections 3.4.18.7.6 & 3.4.18.8.6.

7.5.1.5.1 Create Critical Logistics Items Chart

<u>Description</u>: Users require the capability to create critical logistics items charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.3.

Satisfaction Source: Critical logistics items data base files.

7.5.1.5.1.1 Create Critical Items Summary Chart

<u>Description</u>: Users require the capability to create critical items summary charts with available information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.3.1.

Satisfaction Source: Critical logistics items data base files.

7.5.1.5.2 Display Critical Logistics Items Charts

<u>Description</u>: Users require the capability to display critical logistics items charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.4.

Satisfaction Source: Critical logistics items data base files.

7.5.1.5.2.1 Display Critical Items Gumball Chart

<u>Description</u>: Users require the capability to display critical items gumball charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.3.2.

7.5.1.5.2.2 Display Critical Items Subunit Summary Chart

<u>Description</u>: Users require the capability to display critical items subunit summary charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.3.3.

Satisfaction Source: Critical logistics items data base files.

7.5.1.5.2.3 Display Critical Items Free-text Chart

<u>Description</u>: Users require the capability to display critical items free-text charts. The critical items free-text charts will present critical items status information in a simple listing format.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.3.4.

Satisfaction Source: Critical logistics items data base files.

7.5.1.5.3 Store Critical Logistics Items Charts

<u>Description</u>: Users require the capability to store critical items charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.5.

Satisfaction Source: CSSCS and subordinate units.

7.5.1.5.4 Delete Critical Logistics Items Charts

<u>Description</u>: Users require the capability to delete user-identified critical items charts.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.2.6.

7.5.1.6 Store Critical Logistics Items Data

<u>Description</u>: Users require the capability to store critical items data.

Source Document: FBCB2 UFD, Sections 3.4.18.7.4 & 3.4.18.8.4.

Satisfaction Source: CSSCS and subordinate units.

7.5.1.7 Delete Critical Logistics Items Data

<u>Description</u>: Users require the capability to delete user-specified critical items data. The system will restrict users to deleting only the records of those units to which the user has been granted write access.

Source Document: FBCB2 UFD, Sections 3.4.18.7.5 & 3.4.18.8.5.

Satisfaction Source: Critical logistics items data base files.

7.5.1.8 Print Critical Logistics Items Data

<u>Description</u>: Users require the capability to print critical items data using available software and hardware.

Source Document: FBCB2 UFD, Sections 3.4.18.7.7 & 3.4.18.8.7.

Satisfaction Source: Critical logistics items data base files.

7.5.1.9 Distribute Critical Logistics Items Data

<u>Description</u>: Users require the capability to distribute critical items data to staff elements and subordinate units involved in planning operations.

Source Document: FBCB2 UFD, Sections 3.4.18.7.9 & 3.4.18.8.9.

7.5.2 Monitor POMCUS Item Status

<u>Description</u>: Users require the capability to monitor the status of POMCUS items. The user will be able to add new POMCUS item records to the data base, query the data base to retrieve data matching certain user-specified criteria, and to create reports. Once POMCUS items are issued to units, these items will be tracked by the other functions of this application.

Source Document: STACCS UFD, Section 3.2.1.19.2.

Satisfaction Source: CSSCS and subordinate units.

7.5.2.1 Receive POMCUS Item Status

<u>Description</u>: Users require the capability to receive POMCUS item data from subordinate units and CSSCS.

Source Document: FBCB2 UFD, Sections 3.4.18.7.2 & 3.4.18.8.2.

Satisfaction Source: CSSCS and subordinate units.

7.5.2.2 Add POMCUS Item Status Data

<u>Description</u>: Users require the capability to add new POMCUS item records to the data base. The system will automatically validate that the new POMCUS item exists in the commander's list of items to be tracked, and that the combination of POMCUS item identifying numbers/codes is correct. The system will also restrict data entry to only those users having write permission for a particular unit.

Source Documents: STACCS UFD, Section 3.2.1.19.2.1; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

7.5.2.3 Query POMCUS Item Status

<u>Description</u>: Users require the capability to query the POMCUS items data base to retrieve data that matches certain user-specified criteria. The system will sort the data returned by the query by reporting UIC and by POMCUS site name. The system will also restrict users to querying only those units to which the user has been granted read access.

Source Documents: STACCS UFD, Section 3.2.1.19.2.2; FBCB2 UFD, Sections 3.4.18.7.8 & 3.4.18.8.8.

Satisfaction Source: POMCUS item data base files.

7.5.2.4 Modify POMCUS Item Status

<u>Description</u>: Users require the capability to modify the POMCUS items data base with current data. The system will restrict users to modifying only the records of those units to which the user has been granted write access.

Source Documents: STACCS UFD, Section 3.2.1.19.2.3; FBCB2 UFD, Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: CSSCS and subordinate units.

7.5.2.5 Display POMCUS Reports

<u>Description</u>: Users will have the capability to create reports that provide information on the following areas: (1) status of new validated POMCUS items, (2) POMCUS identity numbers/codes, (3) status of items by UIC POMCUS site name, and (4) status of commander's list of items being tracked.

Source Documents: STACCS UFD, Section 3.2.1.19.2.4; FBCB2 UFD, Sections 3.4.18.7.6 & 3.4.18.8.6.

Satisfaction Source: POMCUS item data base files.

7.5.2.6 Store POMCUS Item Status

Description: Users require the capability to store POMCUS item status data.

Source Document: FBCB2 UFD, Sections 3.4.18.7.4 & 3.4.18.8.4.

Satisfaction Source: CSSCS and subordinate units.

7.5.2.7 Delete POMCUS Item Status

<u>Description</u>: Users require the capability to delete user-specified POMCUS item status data. The system will restrict users to deleting only the records of those units to which the user has been granted write access.

Source Document: FBCB2 UFD, Sections 3.4.18.7.5 & 3.4.18.8.5.

Satisfaction Source: POMCUS item data base files.

7.5.2.8 Print POMCUS Item Status

<u>Description</u>: Users require the capability print POMCUS item status data using available software and hardware.

Source Document: FBCB2 UFD, Sections 3.4.18.7.7 & 3.4.18.8.7.

Satisfaction Source: POMCUS item data base files.

7.5.2.9 Distribute POMCUS Item Status

<u>Description</u>: Users require the capability to distribute POMCUS item data to staff elements and subordinate units involved in planning operations.

Source Document: FBCB2 UFD, Sections 3.4.18.7.9 & 3.4.18.8.9.

Satisfaction Source: POMCUS item data base files.

7.5.3 Monitor Unit Basic Load Information

<u>Description</u>: Users require the capability to monitor, by unit, the status of unit basic load items that the commander considers to be critical to his operational mission. The user will be able to add new unit basic load item records to the data base, query the data base to retrieve data that matches certain user-specified criteria, and to create reports.

Source Document: STACCS UFD, Section 3.2.1.19.3.

Satisfaction Source: CSSCS and subordinate units.

7.5.3.1 Receive Unit Basic Load Information

<u>Description</u>: Users require the capability to receive unit basic load information from subordinate units and CSSCS.

Source Document: FBCB2 UFD, Sections 3.4.18.7.2 & 3.4.18.8.2.

Satisfaction Source: CSSCS and subordinate units.

7.5.3.2 Add Unit Basic Load Information

<u>Description</u>: Users require the capability to add new unit basic load records to the data base. The system will automatically validate that the new unit basic load items exist in the commander's list of items to be tracked, and that the combination of critical item identifying numbers/codes is correct. The system will also restrict data entry to only those users having write permission for a particular unit.

Source Documents: STACCS UFD, Section 3.2.1.19.3.1; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

7.5.3.3 Query Unit Basic Load Information

<u>Description</u>: Users require the capability to query the unit basic load items data base to retrieve data matching certain user-specified criteria. The system will sort the data returned by the query by UIC. The system will also restrict users to querying only those units to which the user has been granted read access.

Source Documents: STACCS UFD, Section 3.2.1.19.3.2; FBCB2 UFD, Sections 3.4.18.7.8 & 3.4.18.8.8.

Satisfaction Source: Unit basic load information data base files.

7.5.3.4 Modify Unit Basic Load Information

<u>Description</u>: Users require the capability to modify the unit basic load data base with current data. The system will restrict users to modifying only the records of those units to which the user has been granted write access.

Source Documents: STACCS UFD, Section 3.2.1.19.3.3; FBCB2 UFD, Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: CSSCS and subordinate units.

7.5.3.5 Display Unit Basic Load Reports

<u>Description</u>: Users require the capability to create basic load reports in the following areas: (1) status of unit basic load items that the commander considers to critical, (2) status of new unit basic load item records, (3) status and validation of critical item identifying numbers/codes.

Source Documents: STACCS UFD, Section 3.2.1.19.3.4; FBCB2 UFD, Sections 3.4.18.7.6 & 3.4.18.8.6.

Satisfaction Source: Unit basic load information data base files.

7.5.3.6 Store Unit Basic Load Information

<u>Description</u>: Users require the capability to store unit basic load information.

Source Document: FBCB2 UFD, Sections 3.4.18.7.4 & 3.4.18.8.4.

Satisfaction Source: CSSCS and subordinate units.

7.5.3.7 Delete Unit Basic Load Information

<u>Description</u>: Users require the capability to delete user-specified unit basic load information. The system will restrict users to deleting only the records of those units to which the user has been granted write access.

Source Document: FBCB2 UFD, Sections 3.4.18.7.5 & 3.4.18.8.5.

Satisfaction Source: Unit basic load information data base files.

7.5.3.8 Print Unit Basic Load Information

<u>Description</u>: Users require the capability to print unit basic load information using available software and hardware.

Source Document: FBCB2 UFD, Sections 3.4.18.7.7 & 3.4.18.8.7.

Satisfaction Source: Unit basic load information data base files.

7.5.3.9 Distribute Unit Basic Load Information

<u>Description</u>: Users require the capability to distribute unit basic load information to staff elements and subordinate units involved in planning operations.

Source Document: FBCB2 UFD, Sections 3.4.18.7.9 & 3.4.18.8.9.

Satisfaction Source: Unit basic load information data base files.

7.5.4 Monitor Logistics and Supply Status

<u>Description</u>: Users require a capability to determine the current status of supplies and other logistics items.

Source Document: STACCS UFD, Section 3.2.1.19.5.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.1 Receive Logistics and Supply Status

<u>Description</u>: Users require the capability to receive logistics and supply status information from subordinate units and CSSCS.

Source Document: FBCB2 UFD, Sections 3.4.18.7.2 & 3.4.18.8.2.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.2 Manage General Supply/Class I, II, VI Status

Description: This application will provide General Supply processing and requirements and shortfall projection capabilities for system supported headquarters at every echelon of command. It will store and retrieve data on the availability of general supplies and the requirements for general supplies, calculate general supply requirements particularly for Class I (Subsistence), II (Clothing), and VI (Personal non-military of supplies and sundry items, and perform assessments of supply availability and requirements. The function will address time-phased requirements and support for mobilization, deployments, employments, sustainment, redeployments, demobilizations, reconstitution, force readiness and training. The function will include the monitoring of general supply availability, the generation of sourced and unsourced general supply requirements to support appropriate COAs and plans, the analysis of asset availability, shortfall identification, establishing priorities and allocations. The products of this function will be campaign plan and OPLAN sourced and unsourced general supply requirements and shortfalls. Unsourced campaign plan and OPLAN requirements are sent to Resource Commands, Services, and Components for sourcing. The results of these sourcing actions shall be enhanced, tracked and stored by these common processes.

This function will provide visibility over intra- and inter-theater in-transit cargo and allow for more effective control of command-controlled items. These common doctrinal and functional data requirements and their associated processing capabilities will support the preparation of the commanders' and staff estimates, COA development, refinement, evaluation, establishment of priorities and allocations. They will assist in the development and execution of the campaign plan and its supporting OPLANs and OPORDs.

This function will provide the capability to enter, query, update, and project data and to generate reports on the status of critical supplies and projected receipts, in selected categories or classes, by physical location worldwide and in the area of operations or projected arrival port. Data shall include time-phased quantities (by type) received, expended, on hand, and projected receipt. Information on projected receipts shall be required to provide the commander with a complete picture on which to base operational decisions.

Source Documents: AGCCS SSS, Section 3.2.1.4.2.3; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.3 Manage Petroleum, Oil, and Lubricants (POL)/Class III Status

Description: This function will provide Class III POL processing, requirements, and shortfall projection capabilities for bulk and packaged POL products and related units at a wide variety of system supported headquarters. These processes shall maintain, generate, and retrieve data pertaining to POL requirements necessary to support a plan, and the availability of POL to meet those requirements. This application shall address time-phased requirements and support for mobilization, deployments, employments, sustainment, redeployments, demobilizations, reconstitution, force readiness and training. These capabilities shall include detailed visibility over intra- and intertheater in-transit POL shipments. They shall support POL processing capabilities that analyze plan requirements, compare them to asset availability, project shortfalls, establish priorities and allocations of POL assets and units.

Source Documents: AGCCS SSS, Section 3.2.1.4.2.1; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Mange Construction and Barrier Material/Class IV Status 7.5.4.4

Description: This function will provide Class IV construction and barrier materials processing,

requirements, and shortfall projection capabilities for construction and barrier materials products and related units

at a wide variety of system supported headquarters. These processes shall maintain, generate, and retrieve data

pertaining to construction and barrier materials requirements necessary to support a plan, and the availability of

construction and barrier materials supplies to meet those requirements. This application shall address time-phased

requirements and support for mobilization, deployments, employments, sustainment, redeployments, demobilizations,

reconstitution, force readiness and training. These capabilities shall include detailed visibility over intra- and inter-

theater in-transit construction and barrier materials shipments. They shall support construction and barrier materials

processing capabilities that analyze plan requirements, compare them to asset availability, project shortfalls, establish

priorities and allocations of construction and barrier materials assets and units.

Source Document: FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

Manage Munitions/Class V Status 7.5.4.5

Description: This function will provide munitions processing and requirements and shortfall

projection capabilities at system supported headquarters at varying degrees of aggregation and summarization. This

application shall maintain, generate, and retrieve data pertaining to Class V munitions requirements and related units

necessary to support a plan and the availability of munitions to meet those requirements. This application shall

address time-phased requirements and support for mobilization, deployments, employments, sustainment, redeployments, demobilizations, reconstitution, force readiness and training. Personal Computer - Logistics

Capability Estimator (PC-LCE) will enhance and replace current LCE functionality. This application shall provide

visibility over worldwide storage, current production, plus intra- and inter-theater in-transit cargo, and allow for more

effective acquisition and allocation control of essential sustainment items and units.

Source Documents: AGCCS SSS, Section 3.2.1.4.2.2; FBCB2 UFD, Sections 3.4.18.7.1 &

3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

7-17

7.5.4.6 Major End Item/Class VII Status

<u>Description</u>: This function will provide Class VII Major End Items processing and requirements and shortfall projection capabilities at system supported headquarters. The application shall maintain, generate, and retrieve data pertaining to major end item requirements necessary to support appropriate COAs and plans, and the availability of items to meet those requirements. The function will address time-phased requirements and support for mobilization, deployments, employments, sustainment, redeployments, demobilizations, reconstitution, force readiness and training. The application shall provide the user with the capability to produce a critical items assessment that highlights significant differences between required and available quantities of critical items. The application shall provide the capability to formulate, distribute, and monitor redistribution of major end items in support of mobilization, demobilization, sustainment, training and reconstitution.

Source Documents: AGCCS SSS, Section 3.2.1.4.2.4; FBCB2 Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.7 Manage Medical Supplies/Class VIII Status

<u>Description</u>: Users will have the capability to monitor information on critical items of medical supply and equipment. The user will have the capability to enter data, edit data, and print reports concerning these critical items. Specific elements of information to be monitored are: national stock number (NSN), nomenclature, quantity required, quantities on hand, quantities due in, date required, DODIC, DOS, LIN, OPLAN-ID, priority of issue, projected 30 day issues, projected 30 day receipts, projected 60 day receipts, and supply class/subclass.

Source Documents: STACCS UFD, Section 3.2.1.13.7; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.8 Display Logistics and Supply Status

<u>Description</u>: Users require the capability to create, modify, store, delete, and distribute logistics and supply reports for the class of supply consumption models, both by summary and class of supply. Additional report requirements include: (1) required supply rate calculation results, (2) display the arrival of critical supply items

at a very detailed level of resolution, (3) display the flow of CSS units into and out of the theater, (4) forecast the logistics position of the theater over time and for a number of different logistics indicators, and (5) fuel requirements.

<u>Source Documents</u>: STACCS UFD, Section 3.2.1.19.5; MCS UFD, Section 3.2.1.4.1.1.3.4; FBCB2 Sections 3.4.18.7.6 & 3.4.18.8.6.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.8.1 Create Logistics and Supply Status Report

<u>Description</u>: Users require the capability to create logistics and supply reports with the current logistics and supply information.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.3.4.1; FBCB2 Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.8.2 Modify Logistics and Supply Status Report

<u>Description</u>: Users require the capability to modify logistics and supply reports as new information is received.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.3.4.2 & 3.2.1.4.1.1.3.4.3; FBCB2 Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.8.3 Store Logistics and Supply Status Report

<u>Description</u>: Users require the capability to store logistics and supply status reports.

Source Document: FBCB2 UFD, Sections 3.4.18.7.4 & 3.4.18.8.4.

7.5.4.8.4 Delete Logistics and Supply Status Report

<u>Description</u>: Users require the capability to delete user-specified logistics and supply status reports.

Source Document: FBCB2 UFD, Sections 3.4.18.7.5 & 3.4.18.8.5.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.8.5 Distribute Logistics and Supply Status Reports

<u>Description</u>: Users require the capability to distribute logistics and supply status reports to selected nodes and higher headquarters.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.3.4.4; FBCB2 Sections 3.4.18.7.9 & 3.4.18.8.9.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.9 Manage Repair Parts/Class IX Status

<u>Description</u>: This function will provide Class IX Repair Parts processing and requirements and shortfall projection capabilities at system supported headquarters. The application shall maintain, generate and retrieve data pertaining to Class IX items. This application shall address time-phased requirements and support for mobilization, deployments, employments, sustainment, redeployments, demobilizations, reconstitution, force readiness and training. The application shall provide the user with the capability to produce a critical items assessment that highlights significant differences between required and available quantities of critical items, and to establish priorities and allocations of Class IX items.

Source Documents: AGCCS SSS, Section 3.2.1.4.2.5; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

7.5.4.10 Manage Non-Military/Class X and Miscellaneous Supplies Status

Description: Users will have a capability to monitor the types and quantities of supplies and transportation means for relief operations, by quantities requested, total quantity provided, quantities provided in the last 24 hours, and quantities projected to arrive. Types of supplies that will be monitored include rations, tents, bedding, shower units, light sets, generators, bottled water, water trailers, ice, portable toilets, male and female clothing, comfort packs, plastic sheeting, construction materials (lumber, plywood, nails, etc.), eating utensils, and donated relief supplies. The system will also provide STACCS users with information concerning the number of sorties flown in accomplishing support, and the number to be flown in the next 72 hours. Users will be able to add information to the database, query the database, update information, and prepare pre-formatted reports.

Source Documents: STACCS UFD, Section 3.2.1.18.6.2; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.11 Modify Logistics and Supply Status

<u>Description</u>: Users require the capability to modify logistics and supply status information. The system will restrict users to modifying only the records of those units to which the user has been granted write access.

Source Document: FBCB2 UFD, Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: CSSCS and subordinate units.

7.5.4.12 Store Logistics and Supply Status

Description: Users require the capability to store logistics and supply status information.

Source Document: FBCB2 UFD, Sections 3.4.18.7.4 & 3.4.18.8.4.

7.5.4.13 Delete Logistics and Supply Status

<u>Description</u>: Users require the capability to delete logistics and supply status information. The system will restrict users to deleting only the records of those units to which the user has been granted write access.

Source Document: FBCB2 UFD, Sections 3.4.18.7.5 & 3.4.18.8.5.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.14 Query Logistics and Supply Status

<u>Description</u>: Users require the capability to query the logistics and supply status data base. The system will restrict users to querying only the records of those units to which the user has been granted write access.

Source Document: FBCB2 UFD, Sections 3.4.18.7.8 & 3.4.18.8.8.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.15 Print Logistics and Supply Status

<u>Description</u>: Users require the capability to print logistics and supply status information using available software and hardware.

Source Document: FBCB2 UFD, Sections 3.4.18.7.7 & 3.4.18.8.7.

Satisfaction Source: Logistics and supply status data base files.

7.5.4.16 Distribute Logistics and Supply Status

<u>Description</u>: Users require the capability to distribute logistics and supply status information to staff elements and subordinate units involved in planning operations.

Source Document: FBCB2 UFD, Sections 3.4.18.7.9 & 3.4.18.8.9.

Satisfaction Source: Logistics and supply status data base files.

Monitor Maintenance Information 7.5.5

Description: Users require a capability to maintain current information about the status and

locations of maintenance facilities, and the maintenance status of major end items of equipment in the force.

Logistics staff users will be able to monitor information about maintenance services, including recovery, battle

damage assessment, and repair, as well as the status of Class IX supplies. The function will be capable of

interoperating with CSSCS and joint and strategic automated C2 systems.

Source Document: STACCS UFD, Section 3.2.1.19.6.

Satisfaction Source: Maintenance information data base files.

Monitor and Evaluate Maintenance Data 7.5.5.1

Description: Users require a capability to monitor and evaluate maintenance status information and

maintenance requirements, and to evaluate all collected data against maintenance thresholds. This data includes

information about the status of Army aircraft, wheeled vehicles, tracked vehicles, missile systems, rail assets, marine

craft, information management systems, and light equipment.

Source Document: STACCS UFD, Section 3.2.1.19.6.1.

Satisfaction Source: Maintenance information data base files.

Manage the Logistics Data Base 7.5.6

Description: Users require the capability to manage the logistics data base by maintaining the

logistics validation table, and by managing the UIC permissions table to restrict access to authorized users.

Source Document: STACCS UFD, Section 3.2.1.19.4.

Satisfaction Source: User-defined.

7-23

7.5.6.1 Manage UIC Logistics User Permissions

<u>Description</u>: Authorized users require the capability to maintain the logistics UIC user permissions table. The authorized user will be able to add new records to the table, to query the data base to retrieve data matching certain user-specified criteria, and to update the validation table.

Source Document: STACCS UFD, Section 3.2.1.19.4.1.

Satisfaction Source: User-defined.

7.5.6.2 Update Logistics Factors

<u>Description</u>: Users need a capability to maintain current information about logistics factors, which include apportionment rates, consumption rates, and area multiple codes.

Source Document: STACCS UFD, Section 3.2.1.19.4.2.

Satisfaction Source: CSSCS and subordinate units.

7.5.6.3 Maintain Logistics Validation Table

<u>Description</u>: Authorized users require the capability to maintain the logistics validation table. The authorized user will be able to add new records to the table, to query the data base to retrieve data that matches certain user-specified criteria, and to update the validation table.

Source Document: STACCS UFD, Section 3.2.1.19.4.3.

Satisfaction Source: User-defined.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 8

CONVOY PLANNING FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the convoy planning common user requirements.

8.1 FUNCTION NAME

Convoy Planning

8.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to plan convoys and prepare and issue movement orders.

8.3 FUNCTION DESCRIPTION

The Convoy Planning common function supports commanders and staffs (combat, combat support, and combat service support) in planning unit road movements. This function will assist the user with the planning of unit movement for employment or further deployment. Using this function, staff users will be able to plan convoys and monitor their movement. The function will allow the user to receive movement planning information in the form of data files from other headquarters. It will then assist the user in preparing and issuing movement orders and overlays. It will facilitate battle command by automating convoy planning throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Receive movement planning information data files.
- Automatically determine the quickest route.

- Consider obstacles, NBC hazards, terrain, weather, and the enemy situation in selecting the best route.
- Prepare movement tables.
- De-conflict multiple convoy routes and schedules.
- Prepare movement overlays.
- Prepare and issue movement orders.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute convoy planning data.

8.4 REFERENCES

The following documents provided the user requirements for this function:

- Maneuver Control System (MCS) User Functional Description (UFD), Sections 3.2.1.2.4
 & 3.2.1.3.1.4
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.2.13.5
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.1.

8.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 8-1 depicts the hierarchy of the user functional requirements.

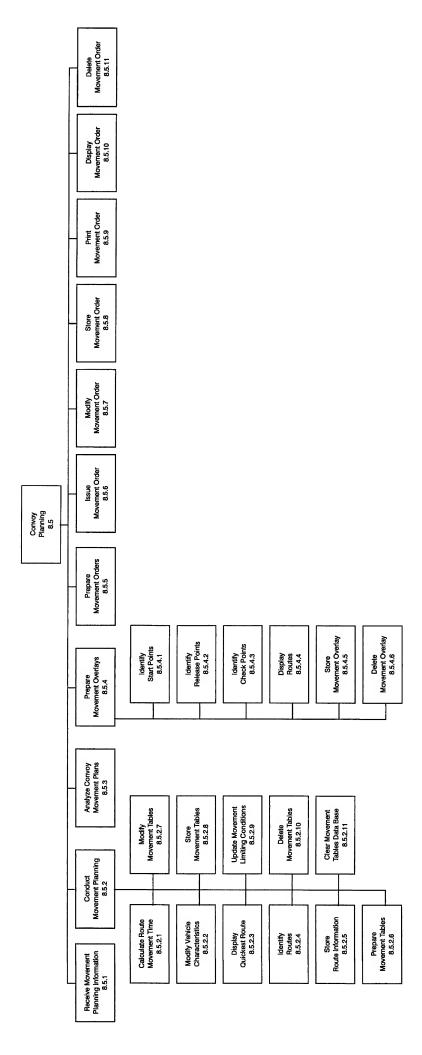


Fig 8-1 Convoy Planning Decomposition

8.5.1 Receive Movement Planning Information

<u>Description</u>: Users require the capability to electronically receive movement planning information data files from other headquarters.

Source Document: FBCB2 UFD, Section 3.4.1.4.2.

Satisfaction Source: Higher headquarters.

8.5.2 Conduct Movement Planning

Description: This function will assist the user with movement planning.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.

<u>Satisfaction Source</u>: Higher headquarters' movement planning data base files, terrain, weather, NBC, obstacle, friendly situation, and enemy situation data base files.

8.5.2.1 Calculate Route Movement Time

<u>Description</u>: Users require the capability to calculate the time a user-selected type of vehicle will take to transfer a user-selected route.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.1.

Satisfaction Source: Terrain and weather data base files.

8.5.2.2 Modify Vehicle Characteristics

<u>Description</u>: Users require the capability to modify vehicle characteristics. They also require the capability to then store the new characteristics without removing the old characteristics.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.2.

Satisfaction Source: Vehicle characteristics data base files and user-defined.

8.5.2.3 Display Quickest Route

<u>Description</u>: Users require the capability to display, over a map display, the quickest movement route between two user-specified points, considering known obstacles, terrain, and known enemy locations. Users also require a capability to analyze the data in NBC reports in order to locate, identify, and/or predict the location and extent of contaminated areas, determine the degree and extent of the contamination, coordinate with provost marshal/military police to find safe routes around or through the contamination, and monitor the decay, weathering, and movement of contamination within the area of operations.

Source Documents: MCS UFD, Section 3.2.1.3.1.4.1.3; STACCS UFD, Section 3.2.2.13.5.3.

Satisfaction Source: Terrain, weather, obstacle, NBC, and enemy situation data base files.

8.5.2.4 Identify Routes

Description: Users require the capability to specify a movement route on a map display.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.4.

Satisfaction Source: Map display and user-defined.

8.5.2.5 Store Route Information

<u>Description</u>: Users require the capability to store all route information.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.5.

Satisfaction Source: Route data base files.

8.5.2.6 Prepare Movement Tables

Description: Users require the capability to calculate and prepare a movement table. The staff develops the road movement table, specifying serial/movement numbers, dates, compositions, vehicle load classifications, routes, start/end/clear times, and critical points. Mathematical algorithms and tables are used to determine table entries. Users require the capability to retrieve stored information and determine the following: unit

type and size; terrain and road conditions; number of vehicles per march unit, serial, and convoy; vehicle characteristics; distance between vehicles, march units, and convoys; combat environment; weather conditions; and visibility conditions (night/day).

Source Document: MCS UFD, Sections 3.2.1.2.4.2 & 3.2.1.3.1.4.1.6.

Satisfaction Source: Friendly situation, route, terrain, weather, and movement planning data base files.

8.5.2.7 Modify Movement Tables

<u>Description</u>: Users require the capability to modify movement tables with user inputs. The road movement table is electronically retrieved, modified, and updated, as necessary.

Source Document: MCS UFD, Sections 3.2.1.2.4.4 & 3.2.1.3.1.4.1.7.

<u>Satisfaction Source</u>: Friendly situation, enemy situation, route, terrain, weather, and movement planning data base files.

8.5.2.8 Store Movement Tables

<u>Description</u>: Users require the capability to store movement tables.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.8.

Satisfaction Source: Movement tables data base files.

8.5.2.9 Update Movement Limiting Conditions

<u>Description</u>: Users require the capability to update movement tables with the current movement limiting conditions (i.e., terrain, weather, contaminated areas, obstacles, and enemy situation).

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.9.

<u>Satisfaction Source</u>: Friendly situation, enemy situation, terrain, weather, obstacle, and NBC hazard data base files.

8.5.2.10 Delete Movement Tables

<u>Description</u>: Users require the capability to search the movement data base to identify movement tables. Users require the capability to then delete identified movement tables.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.10.

Satisfaction Source: Movement tables data base files.

8.5.2.11 Clear Movement Tables Data Base

<u>Description</u>: Users require the capability to clear all movement tables from the movement table data base.

Source Document: MCS UFD, Section 3.2.1.3.1.4.1.11.

Satisfaction Source: Movement tables data base files.

8.5.3 Analyze Convoy Movement Plans

Description: Users will be able to analyze convoy movement plans. A user will be able to identify points of conflict between two or more convoys, define and apply events to the set of convoy movement schedules that disrupt the flow going through specified locations for specified periods of time, and then to view the impact on the schedules. Typical events that could be used in this analysis function are ice storms, rain, and accidents. Users should be able to define any event that suits their need. The definition of an event includes its name, a text description, default values, and duration time. The user then should be able to apply these events to all convoys in an OPLAN.

Source Document: STACCS UFD, Section 3.2.2.13.5.4.

Satisfaction Source: Movement tables, weather, and terrain data base files.

8.5.4 Prepare Movement Overlays

<u>Description</u>: Users require the capability to add, delete, modify, move, and copy standard movement symbology to prepare a movement overlay.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.

Satisfaction Source: Symbol library and map display.

8.5.4.1 Identify Start Points

Description: Users require the capability to identify route start points on the overlay.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.1.

Satisfaction Source: Symbol library and map display.

8.5.4.2 Identify Release Points

<u>Description</u>: Users require the capability to identify route release points on the overlay.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.2.

Satisfaction Source: Symbol library and map display.

8.5.4.3 Identify Check Points

<u>Description</u>: Users require the capability to identify routes check points on the overlay.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.3.

Satisfaction Source: Symbol library and map display.

8.5.4.4 Display Routes

<u>Description</u>: Users require the capability to display routes on the overlay.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.4.

Satisfaction Source: Symbol library and map display.

8.5.4.5 Store Movement Overlay

<u>Description</u>: Users require the capability to store movement overlays.

Source Document: MCS UFD, Section 3.2.1.3.1.4.2.5.

Satisfaction Source: Movement overlay data base files.

8.5.4.6 Delete Movement Overlay

<u>Description</u>: Users require the capability to delete user-specified movement overlays.

Source Document: FBCB2 UFD, Section 3.4.1.4.5.

Satisfaction Source: Movement overlay data base files.

8.5.5 Prepare Movement Orders

<u>Description</u>: This function will facilitate the user in the preparing a movement order. The format generally follows the five-paragraph field order format. Significant components are the concept of movement, order of march, route, density, coordination speed, critical points, convoy control, and logistics paragraphs.

Source Documents: MCS UFD, Sections 3.2.1.2.4.1 & 3.2.1.3.1.4.3; FBCB2 UFD Section 3.4.1.4.1.

<u>Satisfaction Source</u>: Movement tables, friendly situation, course of action (COA), and movement overlay data base files.

8.5.6 Issue Movement Order

<u>Description</u>: Users require the capability to send movement orders, with movement overlay, to subordinate units. The road movement order is distributed through issuance and receipt of acknowledgments from recipients.

Source Documents: MCS UFD, Sections 3.2.1.2.4.3 & 3.2.1.3.1.4.4; FBCB2 UFD, Section 3.4.1.4.9.

Satisfaction Source: Movement order data base files.

8.5.7 Modify Movement Order

<u>Description</u>: Users require the capability to modify a movement order.

Source Documents: MCS UFD, Section 3.2.1.3.1.4.5; FBCB2 UFD, Section 3.4.1.4.3.

<u>Satisfaction Source</u>: Movement tables, friendly situation, enemy situation course of action (COA), and movement overlay data base files.

8.5.8 Store Movement Order

<u>Description</u>: Users require the capability to store movement orders.

Source Documents: MCS UFD, Section 3.2.1.3.1.4.6; FBCB2 UFD, Section 3.4.1.4.4.

Satisfaction Source: Movement orders data base files.

8.5.9 Print Movement Order

<u>Description</u>: Users require the capability to print movement orders using available software and hardware.

Source Document: FBCB2 UFD, Section 3.4.1.4.7.

Satisfaction Source: Movement orders data base files.

8.5.10 Display Movement Order

<u>Description</u>: Users require the capability to display movement orders.

Source Document: FBCB2 UFD, Section 3.4.1.4.6.

Satisfaction Source: Movement orders data base files.

8.5.11 Delete Movement Order

<u>Description</u>: Users require the capability to delete user-specified movement orders.

Source Document: FBCB2 UFD, Section 3.4.1.4.5.

Satisfaction Source: Movement orders data base files.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 9

PERSONNEL RESOURCES FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the personnel resources common user requirements.

9.1 FUNCTION NAME

Personnel Resources

9.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to monitor personnel strength and casualties.

9.3 FUNCTION DESCRIPTION

The *Personnel Resources* common function supports commanders and staffs (combat, combat support, and combat service support) in monitoring personnel strength and casualties. This function will provide the user an automated means for projecting and maintaining current personnel information for all friendly unit personnel. This information includes: personnel readiness data, individual replacement data, casualty data, personnel accounting and strength reporting data, postal operations data, and individual personnel information. The function will allow the user to generate personnel reports, such as battle rosters, personnel summaries, personnel requirement reports, mobilization and training requirements, and unit personnel summaries. It will reflect personnel gains and losses within 24 hours. The losses categories will include wounded in action (WIA), missing in action (MIA), killed in action (KIA), nonbattle injuries (NBDI), and administrative losses. This function will also support the user in performing loss and unit projections for different COAs, over time. The user will be able to interface with CSSCS and Army personnel systems. It will facilitate battle command by automating personnel monitoring throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Monitor aggregate and individual personnel gains.
- Monitor aggregate and individual personnel losses, including KIA, WIA, MIA, and NBDI.
- Monitor current operational strength and critical personnel requirements.
- Display and report force personnel data.
- Manage the force casualty data base.
- Manage casualty mail.
- Interface with the Army personnel data base.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute convoy planning data.

9.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Section 3.2.1.4.12
- Maneuver Control System (MCS) User Functional Description (UFD), Section 3.2.1.4.1.1.3
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.1.15
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.18.

9.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 9-1 depicts the hierarchy of the user functional requirements.

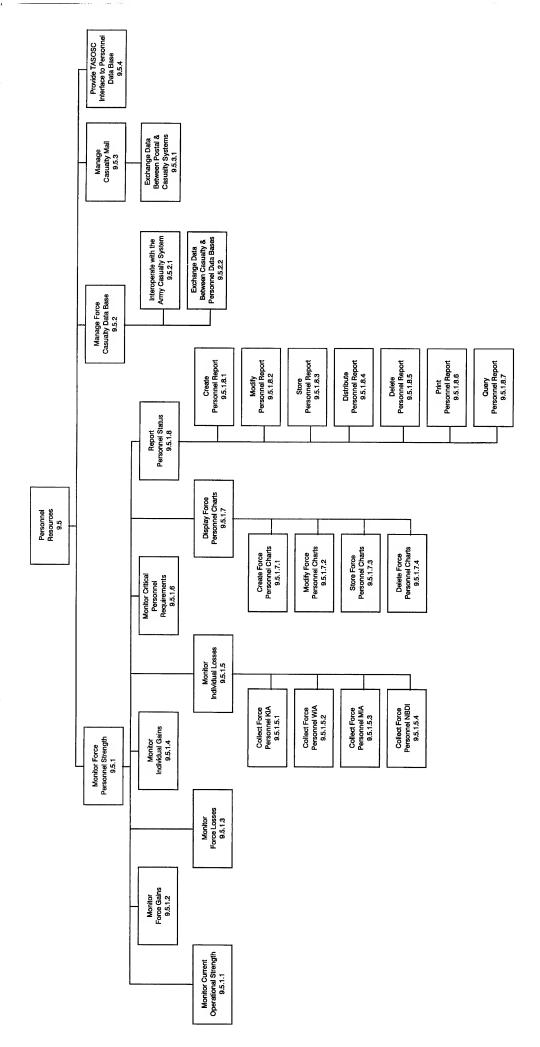


Fig 9-1 Personnel Resources Decomposition

9.5.1 Monitor Force Personnel Strength

Description: Users require the capability to monitor the personnel strength of any force unit. There should be a category each for military, civilian-appropriated funds, civilian-nonappropriated funds, civilian-red cross, civilian-contractors, civilian-local nationals, and civilian-3rd country nationals. The user will be able to select units by unit identification code (UIC), view current data for the unit, edit information on the screen and update the personnel data base, and execute queries to obtain information by entering selected criteria for search and retrieval. This function will provide the capability to monitor the status of authorized and assigned personnel strengths and of critical personnel shortfalls. It will provide the capability to prioritize and allocate critical resources and to develop options and alternatives to overcome shortfalls and limitations. This function will receive and store personnel status information from subordinate units and CSSCS. It will create, display, and delete personnel charts.

Source Documents: STACCS UFD, Section 3.2.1.15.1; MCS UFD, Section 3.2.1.4.1.1.3.1; AGCCS SSS, Section 3.2.1.4.12.2.

Satisfaction Source: CSSCS and subordinate units

9.5.1.1 Monitor Current Operational Strength

<u>Description</u>: Users require the capability to monitor the current operating strength of all units in the force. There should be a category each for military, civilian-appropriated funds, civilian-nonappropriated funds, civilian-red cross, civilian-contractors, civilian-local nationals, and civilian-3rd country nationals. The user will be able to select individual unit records by unit identification code (UIC) and aggregated by command, view and edit information; and update the data base to reflect personnel strength data.

Source Document: STACCS UFD, Section 3.2.1.15.1.1.

Satisfaction Source: CSSCS and subordinate units

9.5.1.2 Monitor Force Gains

<u>Description</u>: Users require the capability to monitor by categories the aggregate number of in-theater personnel that arrived in each unit in the force having a unit identification code (UIC). Data will reflect aggregate gains within the last 24 hours in each category of personnel. There should be a category each for military, civilian-appropriated fund, civilian-nonappropriated fund, civilian-red cross, civilian-contractors, civilian-local

nationals, and civilian-3rd country nationals. The user will be able to view authorized and operating unit strength

information, edit it on the screen, update the data base, and execute queries according to user-specified criteria. This

function will receive personnel gains information from CSSCS.

Source Documents: STACCS UFD, Section 3.2.1.15.1.2; MCS UFD, Section 3.2.1.4.1.1.3.1.5.

Satisfaction Source: CSSCS and subordinate units

Monitor Force Losses 9.5.1.3

Description: Users require the capability to monitor by categories the aggregate number of

in-theater personnel losses of each unit in the force having a unit identification code (UIC). Data will reflect

aggregate losses within the last 24 hours of military, civilian-appropriated funds, civilian-nonappropriated funds,

civilian-red cross, civilian-contractors, civilian-local nationals, and civilian-3rd country nationals. The user will be

able to view unit authorized and operating strength information, edit it on the screen, update the data base, and

execute queries according to user-specified criteria.

Source Document: STACCS UFD, Section 3.2.1.15.1.3.

Satisfaction Source: CSSCS and subordinate units

Monitor Individual Gains 9.5.1.4

Description: Users require the capability to monitor by category the individual personnel gains of

each unit in the force having a unit identification code (UIC). Data will reflect gains within the last 24 hours of all

personnel, in the categories of replacements and returned-to-duty. There should be a category each for military,

civilian-appropriated funds, civilian-nonappropriated funds, civilian-red cross, civilian-contractors, civilian-local

nationals, and civilian-3rd country nationals. The user will be able to view individual strength information, edit it

on the screen, update the data base, and execute queries according to user-specified criteria.

Source Document: STACCS UFD, Section 3.2.1.15.1.4.

Satisfaction Source: CSSCS and subordinate units

9.5.1.5 Monitor Individual Losses

<u>Description</u>: Users require the capability to monitor by category the individual personnel losses of each unit in the force having a unit identification code (UIC). Data will reflect losses within the last 24 hours of military, civilian-appropriated funds, civilian-nonappropriated funds, civilian-red cross, civilian-contractors, civilian-local nationals, and civilian-3rd country nationals in the categories of wounded in action (WIA), killed in action (KIA), missing in action (MIA), disease non-battle injuries (DNBI), and administrative losses (ADMIN). The user will be able to view individual strength information, edit it on the screen, update the data base, and execute queries according to user-specified criteria.

Source Document: STACCS UFD, Section 3.2.1.15.1.5.

Satisfaction Source: CSSCS and subordinate units

9.5.1.5.1 Collect Force Personnel KIA

<u>Description</u>: Users require the capability to receive force KIA information from subordinate units and/or CSSCS.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.1.1.

Satisfaction Source: CSSCS and subordinate units

9.5.1.5.2 Collect Force Personnel WIA

<u>Description</u>: Users require the capability to receive force WIA information from subordinate units and/or CSSCS.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.1.2.

Satisfaction Source: CSSCS and subordinate units

9.5.1.5.3 Collect Force Personnel MIA

<u>Description</u>: Users require the capability to receive force MIA information from subordinate units and/or CSSCS.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.1.3.

Satisfaction Source: CSSCS and subordinate units

9.5.1.5.4 Collect Force Personnel NBDI

<u>Description</u>: Users require the capability to receive force NBDI information from subordinate units and/or CSSCS.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.1.4.

Satisfaction Source: CSSCS and subordinate units

9.5.1.6 Monitor Critical Personnel Requirements

<u>Description</u>: Users require the capability to monitor critical personnel requirements by grade and military occupational specialty (MOS), for enlisted personnel, or by specialty code (SC) for officers (MOS and SC information should extend out to 9 digits). The user will be able to query the personnel data base by UIC, unit name or number, MOS, SC, grade, civilian (by type) or a combination of these, and to retrieve and view needed information.

Source Documents: STACCS UFD, Section 3.2.1.15.1.6; AGCCS SSS, Section 3.2.1.4.12.1.

Satisfaction Source: CSSCS and subordinate units.

9.5.1.7 Display Force Personnel Charts

<u>Description</u>: Users require the capability to display force personnel charts presenting force personnel information in a usable format.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.3.1.8; FBCB2 UFD, Sections 3.4.18.7.6 &

3.4.18.8.6.

Satisfaction Source: Force personnel data base files.

9.5.1.7.1 Create Force Personnel Charts

<u>Description</u>: Users require the capability to create force personnel charts.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.3.1.7; FBCB2 UFD, Sections 3.4.18.7.1 &

3.4.18.8.1.

Satisfaction Source: Force personnel data base files.

9.5.1.7.2 Modify Force Personnel Charts

<u>Description</u>: Users require the capability to modify force personnel charts with current personnel status information.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.3.1.6; FBCB2 UFD, Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: Force personnel data base files.

9.5.1.7.3 Store Force Personnel Charts

<u>Description</u>: Users require the capability to store force personnel charts.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.3.1.9; FBCB2 UFD, Sections 3.4.18.7.4 &

3.4.18.8.4.

Satisfaction Source: Force personnel data base files.

9.5.1.7.4 Delete Force Personnel Charts

Description: Users require the capability to delete user-identified personnel charts.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.3.1.10; FBCB2 UFD, Sections 3.4.18.7.5 &

3.4.18.8.5.

Satisfaction Source: Force personnel data base files.

9.5.1.8 Report Personnel Status

<u>Description</u>: Users require the capability to create, modify, store, delete, print, query, and distribute personnel reports.

Source Document: MCS UFD, Section 3.2.1.4.1.1.3.3.

Satisfaction Source: Force personnel data base files.

9.5.1.8.1 Create Personnel Report

<u>Description</u>: Users require the capability to create a personnel report fill with current force personnel information.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.3.3.1; FBCB2 UFD, Sections 3.4.18.7.1 & 3.4.18.8.1.

Satisfaction Source: Force personnel data base files.

9.5.1.8.2 Modify Personnel Report

<u>Description</u>: Users require the capability to modify personnel reports. The function will update personnel reports as new information is received.

<u>Source Documents</u>: MCS UFD, Sections 3.2.1.4.1.1.3.3.2 & 3.2.1.4.1.1.3.3.3; FBCB2 UFD, Sections 3.4.18.7.3 & 3.4.18.8.3.

Satisfaction Source: Force personnel data base files.

9.5.1.8.3 Store Personnel Report

<u>Description</u>: Users require the capability to store personnel reports.

Source Document: FBCB2 UFD, Sections 3.4.18.7.4 & 3.4.18.8.4.

Satisfaction Source: Force personnel data base files.

9.5.1.8.4 Distribute Personnel Report

<u>Description</u>: Users require the capability to distribute the force personnel status to higher headquarters and selected nodes.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.4.1.1.3.3.4; FBCB2 UFD, Sections 3.4.18.7.9 & 3.4.18.8.9.

Satisfaction Source: Personnel report data base files.

9.5.1.8.5 Delete Personnel Report

<u>Description</u>: Users require the capability to delete user-specified personnel reports.

Source Document: FBCB2 UFD, Sections 3.4.18.7.5 & 3.4.18.8.5.

Satisfaction Source: Personnel report data base files.

9.5.1.8.6 Print Personnel Report

<u>Description</u>: Users require the capability to print personnel reports using available hardware and software.

Source Document: FBCB2 UFD, Sections 3.4.18.7.7 & 3.4.18.8.7.

Satisfaction Source: Personnel report data base files.

9.5.1.8.7 Query Personnel Report

Description: Users require the capability to query the personnel report data base for specific user-

identified information.

Source Document: FBCB2 UFD, Sections 3.4.18.7.8 & 3.4.18.8.8.

Satisfaction Source: Force personnel data base files.

9.5.2 Manage Force Casualty Data Base

Description: Users require the capability to maintain a current centralized source of casualty data

for all casualties occurring in the force area of operations, by organizational level. The casualty manager will be

able to create multiple casualty reports on any individual and to update previous casualty reports on any individual.

Source Document: STACCS UFD, Section 3.2.1.15.2.

Satisfaction Source: CSSCS and subordinate units.

9.5.2.1 Interoperate with the Army Casualty System

Description: The user will be able to exchange casualty and related personnel information with

the HQDA Casualty Center. A theater-wide linkage system down to and including all divisions and personnel groups

will exist so that users can gather casualty data. Only authorized users will be allowed to add and update casualty

data, and only selected users may be permitted to query the casualty data base.

Source Document: STACCS UFD, Section 3.2.1.15.2.1.

Satisfaction Source: CSSCS and subordinate units.

9.5.2.2 Exchange Data Between Casualty and Personnel Data Bases

<u>Description</u>: The casualty data base will be able to interoperate with the personnel data base, so that any individual loss from a parent unit or loss of a critical MOS will be reflected in the personnel data base.

Source Document: STACCS UFD, Section 3.2.1.15.2.2.

Satisfaction Source: CSSCS and subordinate units.

9.5.3 Manage Casualty Mail

<u>Description</u>: Users require a capability to coordinate the management of casualty mail with medical and personnel actions, and with individual and unit movements. Authorized users will be able to query and retrieve information about the locations and status of casualties wherever they are located, from initial entry into the medical system until return to duty or ultimate disposition in the sustaining base. The system will provide users with the most current data so that, within no more than 24 hours after becoming a casualty, mail can be properly flagged, readdressed, redirected, or held for appropriate action based on the casualty's individual status.

Source Document: STACCS UFD, Section 3.2.1.15.3.

Satisfaction Source: CSSCS and subordinate units.

9.5.3.1 Exchange Data Between Postal Data Base and Casualty Reporting Systems

<u>Description</u>: Users require an automated interface between this application and all casualty reporting systems, and an electronic link between the theater postal system and the Military Postal System.

Source Document: STACCS UFD, Section 3.2.1.15.3.1.

Satisfaction Source: CSSCS and subordinate units.

9.5.4 Provide TASOSC Interface to Personnel Data Base

<u>Description</u>: The TASOSC Director of Personnel and Administration will be granted permission to query and update the records of TASOSC personnel in the personnel data base so that he is able to monitor the

status of personnel assigned to TASOSC units. TASOSC users will also be able to generate personnel reports that identify specially qualified personnel required to support specific missions.

Source Document: STACCS UFD, Section 3.2.1.15.4.

Satisfaction Source: CSSCS and subordinate units.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 10

NBC INFORMATION FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the nuclear, biological, chemical (NBC) information common user requirements.

10.1 FUNCTION NAME

NBC Information

10.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to collect, analyze, maintain, track, and disseminate NBC information.

10.3 FUNCTION DESCRIPTION

The NBC Information common function supports commanders and staffs (combat, combat support, and combat service support) in maintaining NBC information. This function will help the user to collect, analyze, monitor, maintain, and report information concerning friendly and enemy NBC strikes. This includes projecting actual and potential areas and effects of NBC contamination. It will also maintain the NBC weather information necessary to predict areas of contamination. With this function, users will be able to maintain and track the status of NBC logistics and units. They will also have the capability to manage nuclear-capable command information. This function will be able to interoperate with other NBC systems. It will facilitate battle command by automating NBC information monitoring throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

Collect NBC information from other systems.

- Prepare and disseminate NBC 1-5 reports.
- Generate NBC reports, displays, and overlays.
- Maintain NBC strike data.
- Analyze and report actual and predicted areas of NBC contamination.
- Maintain NBC weather data.
- Maintain and track NBC logistics and unit status.
- Maintain nuclear-capable command information.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute NBC information.

10.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Section 3.2.1.4.1.2
- Maneuver Control System (MCS) User Functional Description (UFD), Section 3.2.1.4.1.1.1.9
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.1.2
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.13.

10.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 10-1 depicts the hierarchy of the user functional requirements.

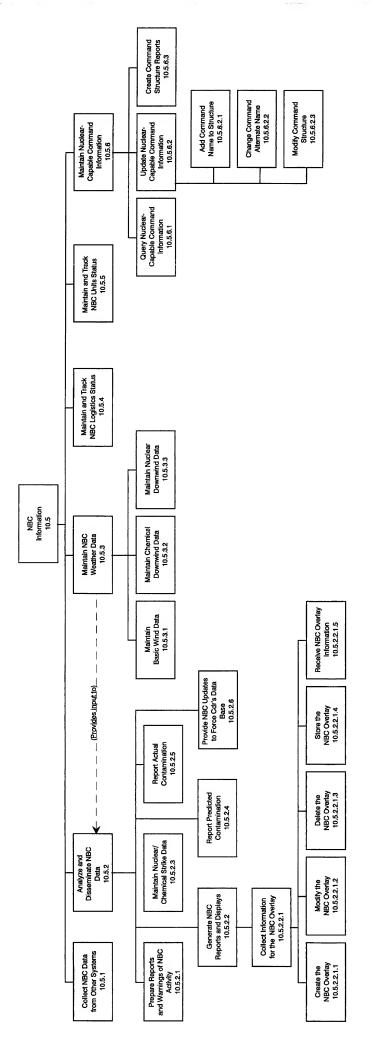


Fig 10-1 NBC Information Decomposition

10.5.1 Collect NBC Data From Other Systems

Description: Users will be able to interface electronically with other battlefield automated systems, such as the Chemical Agent Detector Network (CADNET); the Nuclear, Biological, and Chemical Reconnaissance System (NBCRS); Advanced Airborne Radiac System (AARS); the Nuclear Detonation Detection System (NDS); and the Automated Nuclear, Biological, and Chemical Information System (ANBACIS). Users will also be able to interface with other non-NBC battlefield automated systems that collect or store data needed to support NBC operations, such as the Automated Meteorological System (AMS) and the Meteorological Data System (MDS).

Source Documents: STACCS UFD, Section 3.2.1.2.6; FBCB2 UFD, Sections 3.4.13.7.2 & 3.4.13.8.2.

Satisfaction Source: Other NBC and related data systems.

10.5.2 Analyze and Disseminate NBC Data

Description: Users will have a capability to automatically analyze and disseminate necessary NBC data, reports, and predictions/ warnings and then store this information for record keeping and trend analysis purposes. Data required include fallout and chemical downwind hazard predictions, individual and unit radiation dose status, MOPP status of subordinate units, and status of work-rest cycles. NBC weather data from requirement 2.5.3, Maintain NBC Weather Data, will be used in this analysis. Users will be able to easily process this NBC data, reports, and predictions so that chemical plans, reports, the force level data base, and situation overlays can be continuously updated.

Source Document: STACCS UFD, Section 3.2.1.2.1.

Satisfaction Source: Other NBC and related data systems, subordinate units, and weather information data base files.

10.5.2.1 Prepare Reports and Warnings of NBC Activity

<u>Description</u>: Users will have a capability to prepare, process, store, retrieve, and exchange reports and warnings concerning nuclear detonations, radioactive fallout, biological and chemical attacks, and associated NBC hazards and hazard areas. Reports and warnings will be preformatted and in accordance with U.S. standard procedures, including NBC 1-5 reports.

Source Documents: STACCS UFD, Section 3.2.1.2.1.1; AGCCS SSS, Section 3.2.1.4.1.2.1;

FBCB2 UFD, Sections 3.4.13.7.1 & 3.4.13.8.1.

Satisfaction Source: NBC information data base files.

Generate NBC Reports and Displays 10.5.2.2

Description: Users require a capability to provide commanders with reports that display critical

information items in a standardized format, throughout the command. The function will have the ability to apply

NBC overlays superimposed over a situation map, using standard Army symbology.

Source Documents: STACCS UFD, Section 3.2.1.2.1.2; AGCCS SSS, Section 3.2.1.4.1.2.1;

FBCB2 UFD, Sections 3.4.13.7.6 & 3.4.13.8.6.

Satisfaction Source: NBC information data base files.

Collect Information for the NBC Overlay 10.5.2.2.1

Description: Users will have the ability to create and modify NBC overlays. This function will

receive, store, and delete NBC map graphics information.

Source Document: MCS UFD, Section 3.2.1.4.1.1.1.9.

Satisfaction Source: NBC information data base files.

Create the NBC Overlay 10.5.2.2.1.1

Description: This function will assist the user in creating NBC overlays.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.9.1; FBCB2 UFD, Sections 3.4.13.7.1 &

3.4.13.8.1.

Satisfaction Source: NBC information data base files.

10.5.2.2.1.2 Modify the NBC Overlay

<u>Description</u>: This function will assist the user in modifying NBC overlays.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.9.2; FBCB2 UFD, Sections 3.4.13.7.3 &

3.4.13.8.3.

Satisfaction Source: NBC information data base files.

10.5.2.2.1.3 Delete the NBC Overlay

<u>Description</u>: This function will delete user-identified NBC map graphics information.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.9.3; FBCB2 UFD, Sections 3.4.13.7.5 &

3.4.13.8.5.

Satisfaction Source: NBC overlay data base files.

10.5.2.2.1.4 Store the NBC Overlay

Description: This function will store NBC map graphics information.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.9.4; FBCB2 UFD, Sections 3.4.13.7.4 &

3.4.13.8.4.

Satisfaction Source: NBC information data base files.

10.5.2.2.1.5 Receive NBC Overlay Information

<u>Description</u>: This function will receive and store NBC map graphics information.

Source Documents: MCS UFD, Section 3.2.1.4.1.1.1.9.5; FBCB2 UFD, Sections 3.4.13.7.2 &

3.4.13.8.2.

Satisfaction Source: NBC information data base files.

10.5.2.3 Maintain Nuclear/Chemical Strike Data

<u>Description</u>: Users require the capability to maintain NBC 2, NBC 3, and NBC 5 reports in the data base. The user will be able to add or update data about friendly and enemy nuclear and chemical strikes, and to retrieve information from the data base by the using a data base query. The user will also be able to view, sort, and edit information in the data base.

Source Documents: STACCS UFD, Section 3.2.1.2.1.3; AGCCS SSS, Section 3.2.1.4.1.2.1.

Satisfaction Source: Other NBC and related data systems, subordinate units, and NBC information data base files.

10.5.2.4 Report Predicted Contamination

<u>Description</u>: Users require the capability to maintain warning information and create reports on areas of predicted contamination resulting from chemical and nuclear strikes. Users will be able to query the weather data base and to retrieve required wind and other weather data for use in predicting areas of contamination. Users will be able to display predicted contamination areas on overlays superimposed on a map or other operational portrayal of the battlefield. Predicted contamination will be differentiated from actual contamination. The user will be able to view information in the data base by using a query in the form of an NBC 3 report, edit the report on the screen, and print, transmit, or save the report to a file.

Source Documents: MCS UFD, Section 3.2.1.2.1.4; AGCCS SSS, Section 3.2.1.4.1.2.1.

Satisfaction Source: Weather and NBC information data base files.

10.5.2.5 Report Actual Contamination

<u>Description</u>: Users will be able to maintain current information and create reports on areas of actual contamination resulting from chemical and nuclear strikes. Users will be able to display areas of actual contamination overlays superimposed over an operational portrayal of the battlefield. Actual contamination will be differentiated from the predicted contamination. The user will be able to query the data base by entering user-defined criteria on a blank NBC 5 report, create a new report, add information to an existing report, edit the report, and print, transmit, or save the report to a file.

Source Documents: MCS UFD, Section 3.2.1.2.1.5; AGCCS SSS, Section 3.2.1.4.1.2.1.

Satisfaction Source: NBC information data base files.

10.5.2.6 Provide NBC Updates to Force Commander's Data Base

<u>Description</u>: Users require a capability to access and provide NBC updates to the force level commander's data base. The function will also be able to extract key information that is required to execute chemical planning/operations.

Source Documents: STACCS UFD, Section 3.2.1.2.4; FBCB2 UFD, Sections 3.4.13.7.9 & 3.4.13.8.9.

Satisfaction Source: NBC information data base files.

10.5.3 Maintain NBC Weather Data

<u>Description</u>: Users require the capability to maintain weather data in the forms of Basic Wind Data (BWD), Chemical Downwind Message (CDM), and Effective Downwind Message (EDM) reports.

Source Documents: STACCS UFD, Section 3.2.1.2.2; AGCCS SSS, Section 3.2.1.4.1.2.1.

Satisfaction Source: Weather information data base files.

10.5.3.1 Maintain Basic Wind Data

Description: Users require the capability to maintain current basic wind data that can be used with an NBC 2 report of a nuclear attack to predict contaminated areas. The user will be able to add new data as necessary, store and edit the data, query the data base, and produce reports. Users can view these reports, transmit them to other users, print them, and store them for later use.

Source Document: STACCS UFD, Section 3.2.1.2.2.1.

Satisfaction Source: Weather information data base files.

10.5.3.2 Maintain Chemical Downwind Data

Description: Users require the capability to maintain current chemical downwind data that can be

used with an NBC 2 report of a chemical attack to predict contaminated areas. The user will be able to add new

data as necessary, store and edit the data, query the data base, and produce reports. These reports can be viewed by

users, transmitted to other users, printed, and stored for later use.

Source Document: STACCS UFD, Section 3.2.1.2.2.2.

Satisfaction Source: Weather information data base files.

10.5.3.3 Maintain Nuclear Downwind Data

Description: Users require the capability to maintain current effective downwind data that can be

used with an NBC 2 report of a nuclear attack to predict contaminated areas. The user will be able to add new data

as necessary, store and edit the data, query the data base, and produce reports. These reports can be viewed by users,

transmitted to other users, printed, and stored for later use.

Source Document: STACCS UFD, Section 3.2.1.2.2.3.

Satisfaction Source: Weather information data base files.

10.5.4 Maintain and Track NBC Logistics Status

Description: Users will be able to maintain current information and track the status of NBC

equipment and supplies. This information will be available to allow the NBC staff element to properly allocate NBC

resources to plan and coordinate assigned NBC reconnaissance, decontamination, and smoke operations at critical

times and places.

Source Documents: STACCS UFD, Section 3.2.1.2.3; AGCCS SSS, Section 3.2.1.4.1.2.2.

Satisfaction Source: Supplies and equipment data base files.

10.5.5 Maintain and Track NBC Units Status

<u>Description</u>: Users will be able to maintain current information and track the status of NBC personnel, unit locations and status, and mission status. This information will be available to allow the NBC staff element to properly allocate NBC resources to plan and coordinate assigned NBC reconnaissance, decontamination and smoke operations at critical times and places.

Source Document: STACCS UFD, Section 3.2.1.2.3; AGCCS SSS, Section 3.2.1.4.1.2.2.

Satisfaction Source: Personnel resources and friendly situation data base files.

10.5.6 Maintain Nuclear-Capable Command Information

<u>Description</u>: Users require the capability to maintain information about nuclear capable commands. The user will be able to add new information about nuclear-capable commands, execute queries of the nuclear-capable command data base, update the data base, and create command structure reports.

Source Documents: STACCS UFD, Section 3.2.1.2.5; AGCCS SSS, Section 3.2.1.4.1.2.2.

Satisfaction Source: Nuclear-capable command information data base files.

10.5.6.1 Query Nuclear-Capable Command Information

<u>Description</u>: Users require the capability to query the nuclear-capable command data base to obtain current information about the command structure. The user will be able to query by entering the type of command (MSC, PSC, other service), the official command name, and at least 10 alternate spellings of the command name.

Source Document: STACCS UFD, Section 3.2.1.2.5.1.

Satisfaction Source: Nuclear-capable command information data base files.

Update Nuclear-Capable Command Information 10.5.6.2

Description: Users require the capability to add names to the nuclear-capable command data base,

to change the alternate names of these commands, and to modify the organization and order of the command

structure.

Source Document: STACCS UFD, Section 3.2.1.2.5.2.

Satisfaction Source: Nuclear-capable command information data base files.

10.5.6.2.1 Add Command Name to Structure

Description: Users require the capability to enter the names of nuclear-capable major subordinate

commands (MSC), principal subordinate commands (PSC), and HQS in the command structure. The user will also

be able to add at least 10 alternate spellings of the name of each command at the time of initial entry.

Source Document: STACCS UFD, Section 3.2.1.2.5.2.1.

Satisfaction Source: User-defined.

10.5.6.2.2 Change Command Alternate Name

Description: Users require the capability to add at least 10 alternate spellings of the name of each

nuclear-capable MSC, PSC, and other service, in addition to the official spelling of the name.

Source Document: STACCS UFD, Section 3.2.1.2.5.2.2.

Satisfaction Source: User-defined.

10.5.6.2.3 Modify Command Structure

Description: Users require the capability to modify the structure of nuclear-capable commands

(MSC, PSC, and other service) and to change the order in which commands appear in the nuclear-capable command

structure report and the nuclear weapons stockpile report.

Source Document: STACCS UFD, Section 3.2.1.2.5.2.3.

Satisfaction Source: Nuclear-capable command information data base files.

10.5.6.3 Create Command Structure Reports

<u>Description</u>: Users require the capability to create reports that reflect the results of queries of the nuclear-capable command structure data base. The user will be able to view a report on the screen, store the report, or print the report.

Source Document: STACCS UFD, Section 3.2.1.2.5.3.

Satisfaction Source: Nuclear-capable command information data base files.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 11

WEATHER INFORMATION FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the weather information common user requirements.

11.1 FUNCTION NAME

Weather Information

11.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to collect, analyze, and disseminate weather information.

11.3 FUNCTION DESCRIPTION

The Weather Information common function supports commanders and staffs (combat, combat support, and combat service support) in analyzing weather information. This function will help the user to gather, analyze, and report information concerning the weather's impact on operations. Using this function, users will be able to interoperate with the United States Army Automated Weather System (UAWS) and the Integrated Meteorological System (IMETS). It will help the user format, store, and transmit past and current weather data. It will be capable of providing weather reports, guidance bulletins, ground commander's bulletins, weather warning bulletins, forecast bulletins, observation bulletins, horizontal weather depiction graphics, and weather satellite images. Using this function, the user will also be able to analyze the impact of weather on terrain, and on enemy and friendly forces. It will display the results of this analysis in the form of weather overlays and weather effects matrices. It will facilitate battle command by automating weather information monitoring and analysis throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

Collect weather information from the UAWS and IMETS.

- Analyze the weather's impact on the terrain, and on friendly and enemy forces.
- Provide weather reports, horizontal weather depiction graphics, satellite images, severe weather warnings, and other weather bulletins.
- Display weather impact matrices.
- Provide a user and control node capability.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute weather information.

11.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Section 3.2.1.4.16
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 2.4.6.1.5,
 3.2.1.1.5.3, & 3.2.1.3.1.1.2
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.1.23
- Force XXI Battle Command Brigade and Below (FBCB2) UFD, Section 3.4.3.

11.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 11-1 depicts the hierarchy of the user functional requirements.

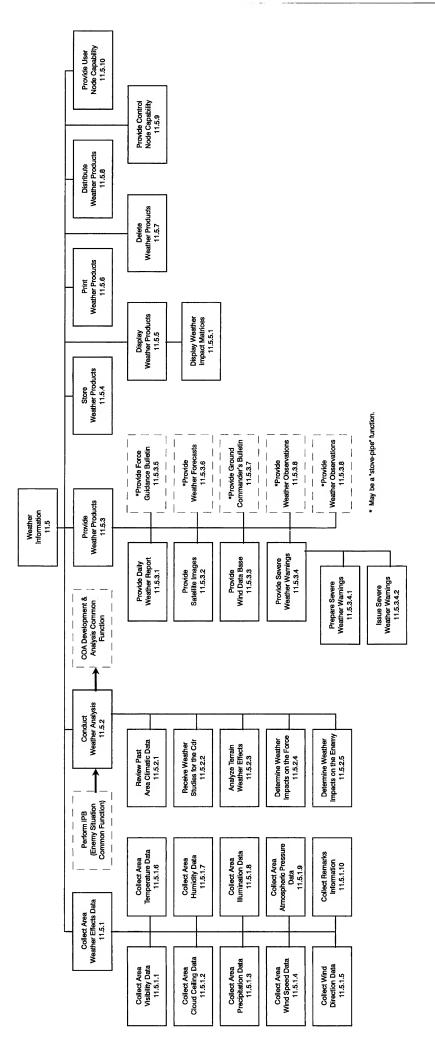


Fig 11-1 Weather Information Decomposition

11.5.1 Collect Area Weather Effects Data

<u>Description</u>: Users require the capability to gather weather reports from the UAWS, IMETS, higher headquarters, and/or G-2/S-2 for their area of operations. Weather reports contain current weather information.

Source Document: MCS UFD, Sections 3.2.1.1.5.3.3 & 3.2.1.3.1.1.2.1.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.1 Collect Area Visibility Data

<u>Description</u>: Users require the capability to collect visibility data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.1.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.2 Collect Area Cloud Ceiling Data

<u>Description</u>: Users require the capability to collect cloud ceiling data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.2.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.3 Collect Area Precipitation Data

<u>Description</u>: Users require the capability to collect precipitation data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.3.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.4 Collect Area Wind Speed Data

<u>Description</u>: Users require the capability to collect wind speed data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.4.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.5 Collect Wind Direction Data

<u>Description</u>: Users require the capability to collect wind direction data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.5.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.6 Collect Area Temperature Data

<u>Description</u>: Users require the capability to collect temperature data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.6.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.7 Collect Area Humidity Data

<u>Description</u>: Users require the capability to collect humidity data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.7.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.8 Collect Area Illumination Data

<u>Description</u>: Users require the capability to collect illumination data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.3.8.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.9 Collect Area Atmospheric Pressure Data

<u>Description</u>: Users require the capability to collect atmospheric pressure data for their area of operations.

Source Document: None.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.1.10 Collect Remarks Information

<u>Description</u>: Users require the capability to collect additional weather related information in the form of unformatted alphanumeric remarks for their area of operations.

Source Document: None.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.2 Conduct Weather Analysis

<u>Description</u>: Users require the capability to conduct weather analyses for the force using input from the UAWS, IMETS, and higher-echelon intelligence channels.

Source Document: MCS UFD, Section 3.2.1.1.5.3.

Satisfaction Source: Weather information data base files and higher headquarters G-2/S-2.

11.5.2.1 Review Past Area Climatic Data

<u>Description</u>: Users require the capability to review historical climatic data for their area of operations.

Source Document: MCS UFD, Section 3.2.1.1.5.3.1.

Satisfaction Source: Higher headquarters G-2/S-2.

11.5.2.2 Receive Weather Studies for the Commander

<u>Description</u>: Users require the capability to receive weather studies to support the development of COA as directed by the commander.

Source Document: MCS UFD, Section 3.2.1.1.5.3.2.

Satisfaction Source: Higher headquarters.

11.5.2.3 Analyze Terrain Weather Effects

<u>Description</u>: Users require the capability to analyze the effects of weather on terrain.

Source Document: MCS UFD, Section 3.2.1.1.5.3.4.

Satisfaction Source: Weather information data base files.

11.5.2.4 Determine Weather Impacts on the Force

<u>Description</u>: Users require the capability to determine the impact of weather on friendly forces, including combined effects of terrain and weather on friendly capabilities, COAs, and dispositions.

Source Document: MCS UFD, Section 3.2.1.1.5.3.5.

Satisfaction Source: Weather information data base files.

11.5.2.5 Determine Weather Impacts on the Enemy

<u>Description</u>: Users require the capability to determine the impact of weather on enemy forces, including combined effects of terrain and weather on enemy capabilities, COAs, and dispositions.

Source Document: MCS UFD, Section 3.2.1.1.5.3.6.

Satisfaction Source: Weather information data base files.

11.5.3 Provide Weather Products

<u>Description</u>: Selected users require a capability to create and distribute the following products: (1) daily weather bulletin, (2) theater guidance bulletin, (3) ground commander's bulletin, (4) weather warnings, (5) forecasts, (6) observations, (7) satellite images, and (8) wind data.

Source Documents: STACCS UFD, Section 3.2.1.23.1; AGCCS SSS, Section 3.2.1.4.16.1.

Satisfaction Source: Weather information data base files.

11.5.3.1 Provide Daily Weather Report

<u>Description</u>: Users require the capability to view, on a 24-hour basis, the daily weather report. The user requires this report to be in plain language text and to provide sky conditions, visibility, precipitation, surface wind, temperatures, and light data for a specific location. The Staff Weather Officer (SWO) will be able to create this report daily for the headquarters or other locations, as necessary.

Source Documents: STACCS UFD, Section 3.2.1.23.1.1; AGCCS SSS, Section 3.2.1.4.16.1; FBCB2 UFD, Sections 3.4.3.7.1 & 3.4.3.8.1.

Satisfaction Source: Weather information data base files.

11.5.3.2 Provide Satellite Images

<u>Description</u>: Users require the capability to view selected satellite pictures to obtain an overview of the large scale weather pattern. The user will be able to view satellite pictures in conjunction with the daily weather report, either singly, or shown in quick succession (in a loop) to give the impression of animation of the cloud masses, and be able to automate the process of turning a satellite image into a situation map (SITMAP) graphical overlay. The user will be able to select the satellite pictures to be displayed in a loop, singly, or not at all. Users also need automated support to be able to turn a satellite image into a SITMAP overlay.

Source Documents: STACCS UFD, Section 3.2.1.23.1.7; AGCCS SSS, Section 3.2.1.4.16.2.

Satisfaction Source: Weather information data base files.

11.5.3.3 Provide Wind Data Base

<u>Description</u>: Users require the capability to import wind data from the Integrated Meteorological

System (IMETS) and then provide this data to the NBC Information function to calculate predicted hazard areas.

Source Document: STACCS UFD, Section 3.2.1.23.1.8.

Satisfaction Source: Weather information data base files.

11.5.3.4 Provide Severe Weather Warnings

<u>Description</u>: Users require the capability to create and distribute plain language warning forecasts

of severe weather conditions such as strong winds, severe thunderstorms, heavy precipitation, and worst conditions

expected during the specified period. Severe weather warnings will normally follow the operations communication

channels. Therefore, the G-3/S-3 operations device will distribute severe weather warning to other system devices

within the command post (CP), to the other echelon CPs, and to subordinate units. Severe weather warnings will

contain the following information: type of severe weather, effective period of warning, severe weather affects, and

area affected.

Source Documents: MCS UFD, Sections 3.2.1.3.1.1.2.3 & 3.2.1.3.1.1.2.9; STACCS UFD, Section

3.2.1.23.1.4; AGCCS SSS, Section 3.2.1.4.16.1.

Satisfaction Source: Weather information data base files.

11.5.3.4.1 Prepare Severe Weather Warnings

<u>Description</u>: The function will assist the operator in preparing severe weather warnings.

Source Document: MCS UFD, Section 3.2.1.3.1.1.2.9.1.

Satisfaction Source: Weather information data base files.

Issue Severe Weather Warnings 11.5.3.4.2

Description: The function will send severe weather warnings to other echelon CPs, subordinate

units, and staff sections.

Source Document: MCS UFD, Section 3.2.1.3.1.1.2.9.2.

Satisfaction Source: Weather information data base files.

Provide Force Guidance Bulletin 11.5.3.5

Description: Selected users require the capability to create and distribute a force guidance bulletin.

The force guidance bulletin will provide, on a 24-hour basis, a plain language bulletin that discusses the major

weather features that will influence the weather in the force's area of operations during the next 24 hours for flying

winds, visibility, clouds, and temperatures. The user also requires a 24-48 and a 48-72 hour weather outlook with

a narrative description of the major weather features expected during the selected time period.

Source Documents: STACCS UFD, Section 3.2.1.23.1.2; AGCCS SSS, Section 3.2.1.4.16.1.

Satisfaction Source: Weather information data base files.

Provide Weather Forecasts 11.5.3.6

Description: Selected users require the capability to create, distribute, and receive weather forecasts

for 24 hours for specific locations. The user will be provided information pertaining to surface wind, visibility,

weather, cloud amounts and heights, icing and turbulence, altimeter setting, and other pertinent remarks. The user

requires weather threshold criteria for various military operations be applied to specific fields in the weather database.

This provides the user a needed capability to observe "good", "bad", or "marginal" weather conditions. The user

then will be able to display these conditions via SITMAP overlays as green, red, or amber dots on appropriate map

background.

Source Documents: MCS UFD, Section 3.2.1.3.1.1.2.2; STACCS UFD, Section 3.2.1.23.1.5;

AGCCS SSS, Section 3.2.1.4.16.1.

Satisfaction Source: Weather information data base files.

11.5.3.7 Provide Ground Commander's Bulletin

Description: Selected users require the capability to create and distribute a ground commander's

bulletin. The ground commander's bulletin will provide guidance for commanders who are without direct weather

support. This bulletin will provide a 48-hour forecast for cloud cover and visibility, a 48-hour outlook, and effective

downwinds valid for a designated period the following day.

Source Documents: STACCS UFD, Section 3.2.1.23.1.3; AGCCS SSS, Section 3.2.1.4.16.1.

Satisfaction Source: Weather information data base files.

11.5.3.8 Provide Weather Observations

Description: Selected users require the capability to import, format, and distribute weather

observations for selected stations. These observations will include surface wind, visibility, weather, cloud amounts

and heights, temperatures, altimeter setting, and other pertinent remarks. The control node will be able to receive

these weather reports from reporting weather stations and to distribute them over the system network.

Source Documents: STACCS UFD, Section 3.2.1.23.1.6; AGCCS SSS, Section 3.2.1.4.16.1.

Satisfaction Source: Weather information data base files.

11.5.3.9 Provide Horizontal Weather Depiction Graphics

<u>Description</u>: Selected users require the capability to create and distribute analysis and forecast

products that graphically display the major weather features which influence weather in the force's area of operations.

Users also require a graphic depiction of the current, 24-hour, 48-hour, and 72-hour forecast for the area of

operations for both staff and mission support.

Source Document: None.

Satisfaction Source: UAWS, IMETS, higher headquarters, and the G-2/S-2.

11.5.4 Store Weather Products

<u>Description</u>: Users require the capability to automatically store all weather products information upon receipt.

Source Documents: MCS UFD, Sections 3.2.1.1.5.3.7 & 3.2.1.3.1.1.2.5; FBCB2 UFD, Sections 3.4.3.7.4 & 3.4.3.8.4.

Satisfaction Source: Weather information data base files.

11.5.5 Display Weather Products

<u>Description</u>: Users require the capability to display current weather situation, weather forecasts, severe weather warnings, weather impact matrices, and weather overlays. This function will display weather information in a usable format on available hardware and software.

<u>Source Documents</u>: MCS UFD, Sections 3.2.1.1.5.3.8 & 3.2.1.3.1.1.2.6; STACCS UFD, Section 3.2.2.17.4.2.7.

Satisfaction Source: Weather information data base files and weather analysis results.

11.5.5.1 Display Weather Impact Matrices

Description: Users require the capability to display a Weather Impact Matrix that depicts weather effects on major weapon and targeting systems, both friendly and enemy. The Weather Impact Matrix will be in a gumball form with avenues of approach arrayed on the left side, command-selected systems arrayed across the top, and color-coded "Gumballs" to depict the operational impact of the weather. Other matrices will display the impacts of weather on the terrain and on the operations of friendly and enemy forces.

Source Documents: MCS UFD, Sections 2.4.6.1.5 & 3.2.1.3.1.1.2.4; FBCB2 UFD, Sections 3.4.3.7.6 & 3.4.3.8.6.

Satisfaction Source: Weather information, friendly and enemy situation, and terrain data base files, and weather analysis results.

11.5.6 Print Weather Products

Description: Users require the capability to print all weather products.

Source Documents: MCS UFD, Section 3.2.1.3.1.1.2.7; FBCB2 UFD, Sections 3.4.3.7.7 & 3.4.3.8.7.

Satisfaction Source: Weather information data base files.

11.5.7 Delete Weather Products

<u>Description</u>: Users require the capability to selectively delete weather products.

<u>Source Documents</u>: MCS UFD, Section 3.2.1.3.1.1.2.8; FBCB2 UFD, Sections 3.4.3.7.5 & 3.4.3.8.5.

Satisfaction Source: Weather information data base files.

11.5.8 Distribute Weather Products

<u>Description</u>: Users require the capability to distribute weather information to staff and subordinate elements, plus any others involved in the development of the plan or execution of the mission. This function will automatically distribute weather date to subordinate units and other staff sections.

<u>Source Documents</u>: MCS UFD, Sections 3.2.1.1.5.3.9 & 3.2.1.3.1.1.2.10; FBCB2 UFD, Sections 3.4.3.7.9 & 3.4.3.8.9.

Satisfaction Source: Weather information data base files.

11.5.9 Provide Control Node Capability

<u>Description</u>: The SWO requires the capability to input data to the system network, or to any other system node that the SWO designates to be the control node. The user requires an automated interface to import weather data continuously from the U.S. Air Force Automated Weather Distribution System (AWDS) and from the Integrated Meteorological System (IMETS). In the interim, the control node will be able to copy weather

information from the United States Air Force Automated Weather Network (AWN) onto storage media. Permissions to delete and update weather data on the system network will be determined by the control node.

Source Documents: STACCS UFD, Section 3.2.1.23.2; AGCCS SSS, Section 3.2.1.4.16.3.

Satisfaction Source: Weather information data base files.

11.5.10 Provide User Node Capability

Description: Users require the capability to view, on a 24-hour basis, the following categories of weather system data: (1) daily weather reports, (2) theater guidance bulletins, (3) ground commander's bulletins, (4) weather warnings bulletins, (5) forecast bulletins, (6) observation bulletins, (7) satellite images, and (8) horizontal

weather depiction graphics.

Source Documents: STACCS UFD, Section 3.2.1.23.3; AGCCS SSS, Section 3.2.1.4.16.3.

Satisfaction Source: UAWS, AWDS, AWN, and IMETS.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 12

EMBEDDED TRAINING FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the embedded training common user requirements.

12.1 FUNCTION NAME

Embedded Training

12.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to train individual users and staff sections in the use of the ABCS system.

12.3 FUNCTION DESCRIPTION

The Embedded Training common function supports commanders and staffs (combat, combat support, and combat service support) in training ABCS users. This function will provide the user with an embedded capability to enhance and maintain the level of skill proficiency necessary to operate the ABCS system. Using the ABCS system the user operates regularly, the user will be able to move from the operational software to the embedded training while the operational software continues to run in the background. It will be capable of training individual operators, staff members, and system maintainers. The embedded training will provide a capability for refresher and sustainment training, entry level on-the-job training; and for instructor-monitored student progress. Embedded training will provide for instructor and key personnel training. Also, by using this function, staff groups will be able to maintain group proficiency in combat staff skills. Staff section training will build on the knowledge and proficiency developed during individual training. Training will be available for each ABCS application. The training's level of difficulty will be adjustable to meet the needs of individual users. This function will facilitate battle command by ensuring there are well trained ABCS users throughout the force projection cycle. Having well trained ABCS users and staff sections will enhance the planning and execution of operations.

This function includes the capability to:

- Provide Category A (individual) training.
- Provide Category C (staff section) training.
- Use the embedded training mode while continuing to run operational software in the background.
- Transition from the operational mode to embedded training in less than one minute.
- Not compromise the security of the system and its data. All users will be restricted in their access to prime system data during their use of the embedded training mode.
- Have minimal impact on the host system's reliability, availability, and maintainability.
- Be constrained by the characteristics and employment of the host system.
- Not endanger personnel, equipment, or system data or permit unsafe operation while in the training mode. The user will be aware at all times of the mode of operation in which the system is running.
- Provide self-paced courses and accommodate students with no knowledge of system software or hardware. Courses will be adjustable to meet the needs of individual students.
- Require no more than 80 hours to complete.

12.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.4.6.2 & 3.5.2.2
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 2.4.5.4,
 3.2.3.1 & 3.5.2

Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.4.1.

12.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 12-1 depicts the hierarchy of the user functional requirements.

12.5.1 Conduct Category A Embedded Training

Description: The embedded training (ET) capability for the individual soldier will be developed to attain and sustain operator, staff user, maintainer, and system orientation skills. This capability will also be used to support New Equipment Training (NET), supervised on-the-job training after NET has departed the unit, and initial training in Training and Doctrine Command (TRADOC) service schools. ET category A (operator) will be implemented as "fully embedded" using primarily "Performance Support System" technology, supplemented with some courseware technology. Users require an electronic Performance Support System (PSS) capability. The following characteristics, as a minimum, will be designed into the ABCS multi-purpose computers to allow for PSS technology applications: (1) an algorithm-based proficiency recognition file (PRF), (2) on-line, context sensitive help, written in modular fashion so that the PRF may tailor the amount of Help to the user proficiency, (3) a records and reports utility that provides score and trend data, (4) a mini-tutorials (MT) function linked to pointers in the help system, including a simple scripted language that units can use to create custom MTs for their needs (MTs are actually small but detailed operational task coaches), (5) courseware, (6) electronic references available on separate media, including an executable file "reader" that allows viewing of the references and adherence to commercial common help key definitions (i.e., F1 key, Ctrl+H, etc.), and (7) adherence to commercial conventions for help key and other keyboard conventions in order to avoid unnecessary retraining.

<u>Source Documents</u>: MCS UFD, Sections 2.4.5.4.1, 3.2.3.1.1 & 3.5.2.1; STACCS UFD, Section 3.2.4.1.1.

Satisfaction Source: Embedded training data base files and system software.

12.5.1.1 Conduct Performance Recognition

<u>Description</u>: Users require the capability to implement algorithm-based proficiency recognition files (PRF).

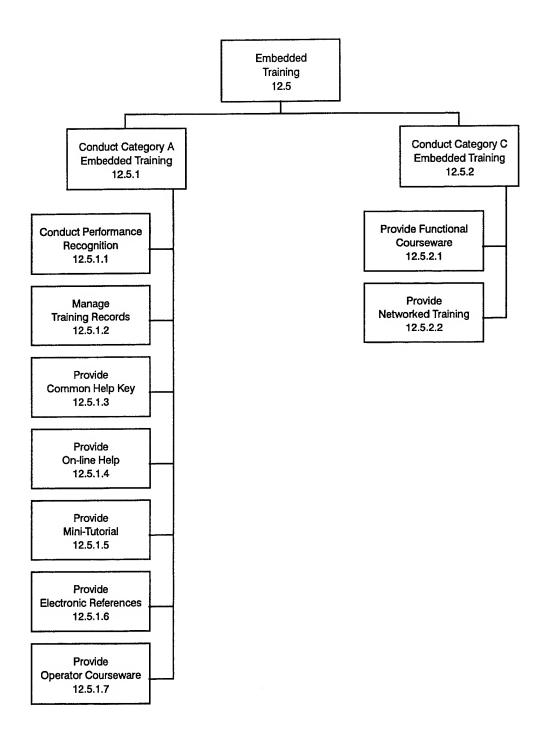


Fig 12-1 Embedded Training Decomposition

Source Document: MCS UFD, Sections 3.2.3.1.1.1 & 3.5.2.1.1.

Satisfaction Source: System software and user-defined..

12.5.1.2 Manage Training Records

<u>Description</u>: Users require the capability to track, record, and display user training progress.

Source Document: MCS UFD, Section 3.2.3.1.1.2.

Satisfaction Source: Embedded training data base files.

12.5.1.3 Provide Common Help Key

<u>Description</u>: Users require the capability of a common HELP key that is accessible in any application.

Source Document: MCS UFD, Section 3.2.3.1.1.6.

Satisfaction Source: System software.

12.5.1.4 Provide On-line Help

<u>Description</u>: Users require the capability of an on-line, content-sensitive help system written in modular fashion so that the PRF may tailor the amount of help to user proficiency.

Source Document: MCS UFD, Sections 3.2.3.1.1.3 & 3.5.2.1.2.

Satisfaction Source: Embedded training data base files.

12.5.1.5 Provide Mini-Tutorial

<u>Description</u>: Users require the capability of mini-tutorials linked to pointers in the help system, including a simple scripted language that units can use to create customized mini-tutorials for their needs.

Source Document: MCS UFD, Sections 3.2.3.1.1.4 & 3.5.2.1.3.

Satisfaction Source: Embedded training data base files.

12.5.1.6 Provide Electronic References

Description: Users require the capability to retrieve and display ABCS reference information.

Source Document: MCS UFD, Section 3.2.3.1.1.5.

Satisfaction Source: Embedded training data base files.

12.5.1.7 Provide Operator Courseware

<u>Description</u>: Users require the capability to select courseware, retrieve courseware from a courseware library, run courseware, and record the results.

Source Document: MCS UFD, Section 3.2.3.1.1.7.

Satisfaction Source: Embedded training data base files.

12.5.2 Conduct Category C Embedded Training

Description: Staff section ET will encompass and build on the individual ET capability to sustain combat ready staff sections in a collective training environment. Users require the capability to implement both fully embedded and umbilical category "C" (functional) embedded training using courseware technology and networked training technology. Courseware requires a generic "manager" program available from the operational system, with data and scenario information available to the courseware "manager" program from separate load-up media (CD-ROM, diskette). This will allow creation of a library of different scenario training disks which can be more easily updated, locally produced, and units can order only those scenarios needed. Networked Training technology will allow ABCS to conduct collective and Force Level (Combined Arms/Battle Staff) training using simulation systems. The goal is for ABCS Networked Training capability to link ABCS devices into FAMSIM training systems such as CBS or WARSIM 2000. This capability will allow ABCS to train in any environment whether it be linked together or using simulation systems, and to be dispersed globally or locally, even in operational environments. It also supplements the realism of training from simpler collective CP training, up to complex simulations that stress Battle

Staffs engaged in Combined Arms. NBC staff users also require an embedded training capability that integrates NBC support for exercises to enhance not only operator training and familiarity with automation, but to improve staff planning and interoperability in individual and collective training exercises such as ARTEPs, CPXs, and FTXs.

Source Documents: MCS UFD, Sections 2.4.5.4.2, 3.2.3.1.2 & 3.5.2.2; STACCS UFD, Section 3.2.4.1.2.

Satisfaction Source: Embedded training data base files.

12.5.2.1 Provide Functional Courseware

<u>Description</u>: Users require the capability to select courseware, retrieve courseware from a courseware library, run courseware, and record the results. Users also require the capability to create a library of different scenario training disks which can be more easily updated and locally produced.

Source Document: MCS UFD, Section 3.2.3.1.2.1.

Satisfaction Source: Embedded training data base files.

12.5.2.2 Provide Networked Training

<u>Description</u>: Users require the capability to conduct a collective and force level (combined arms/battle staff) training simulation. Users also require the capability to link to simulation systems.

Source Document: MCS UFD, Section 3.2.3.1.2.2.

Satisfaction Source: Embedded training data base files.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 13

TRAINING/EXERCISE SUPPORT FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the training/exercise support common user requirements.

13.1 FUNCTION NAME

Training/Exercise Support

13.2 PURPOSE OF FUNCTION

This function will provide the user with an automated capability to manage training and exercises, and to interface with training simulations.

13.3 FUNCTION DESCRIPTION

The Training/Exercise Support common function supports commanders and staffs (combat, combat support, and combat service support) in managing training and conducting exercises. It will allow the interfacing of the ABCS to external simulations, thus allowing users to conduct exercises using simulated forces. This function will also support the development of training management products, such as training guidance, long and short range planning calendars, and training schedules. Using this function, users will be able to plan and conduct exercises. It will also support exercise reporting through the Joint Universal Lessons Learned System (JULLS) and the Joint Exercise Management Program (JEMP). It will facilitate battle command by assisting commanders in training their units throughout the force projection cycle. The results of this training will enhance the planning and execution of operations.

This function includes the capability to:

Manage data and reports related to exercise schedules.

- Interact with the JULLS and JEMP.
- Interface with joint, strategic, and tactical battlefield simulation systems.
- Manage the following training products:
 - Mission Essential Task Lists (METL)
 - Battle Tasks Lists
 - Commander's training assessments
 - Commander's training guidance
 - Short-range training guidance
 - Long and short-range planning calendars
 - Training schedules.

Inherent in this function is the ability for commanders and staffs to create, modify/edit, receive, store, delete, display, print, query, and distribute training and exercise information.

13.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.4.6.1 & 3.2.1.4.7
- Maneuver Control System (MCS) User Functional Description (UFD), Section 3.2.3.2
- Standard Theater Army Command and Control System (STACCS) UFD, Section 3.2.3.6.

13.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 13-1 depicts the hierarchy of the user functional requirements.

13.5.1 Exercise Management

<u>Description</u>: Users require the capability to update, manipulate, store, retrieve, and exchange data and reports related to the five- and ten-year exercise schedules, significant exercise schedules, and exercise-afteraction critiques. This function will also provide Army-unique exercise reporting requirements. It will interact with and share functionality with the JULLS and the JEMP.

Source Document: AGCCS SSS, Section 3.2.1.4.7.

Satisfaction Source: Higher headquarters and exercise management data base files.

13.5.2 Simulation

<u>Description</u>: Users require the capability to interface the ABCS with joint, strategic, and tactical battlefield simulation systems.

Source Document: AGCCS SSS, Section 3.2.1.4.7.1.

Satisfaction Source: ABCS and simulation data files.

13.5.2.1 Manage Interface With Simulations

<u>Description</u>: Users require a capability to manage the bi-directional exchange of information between ABCS and external simulation applications. The required functionality will permit users to conduct exercises using a mix of actual and simulated forces. Users will also be able to display and manage, for training purposes, simulation information about a mature theater. Users require a capability to control the data flow between the command and control (C2) system and the simulation system down to the data element level. The user should have the capability to define specifically the data flow depending on the degree of training value desired, and the number of people required to enter data.

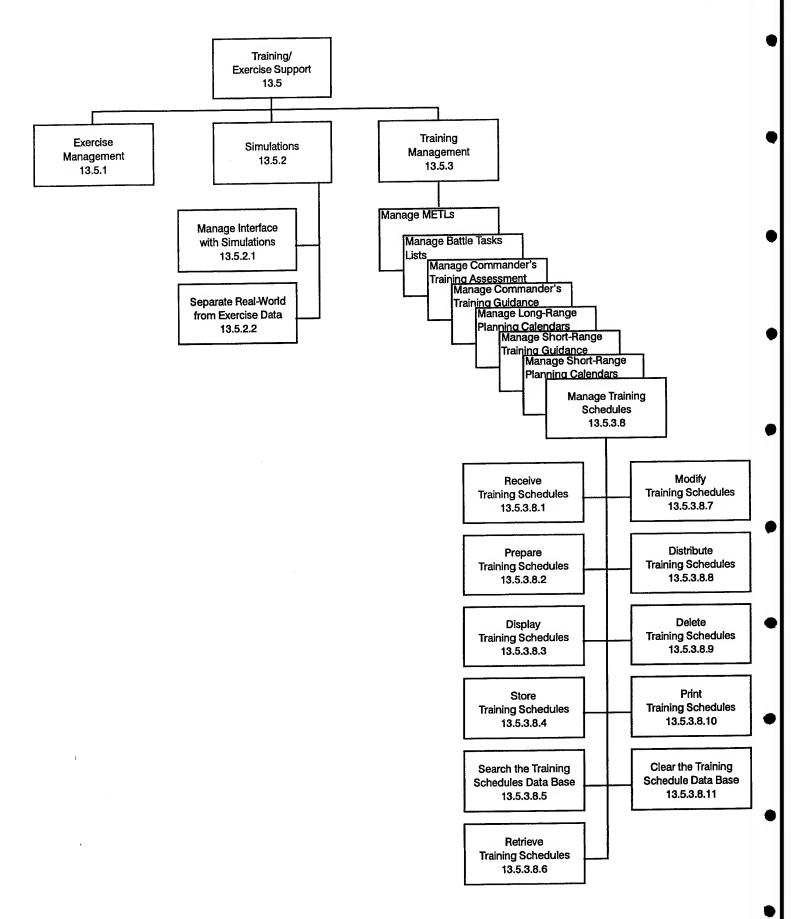


Fig 13-1 Training/Exercise Support Decomposition

Source Documents: AGCCS SSS, Section 3.2.1.4.7.1.1; STACCS UFD, Section 3.2.3.6.

Satisfaction Source: ABCS and simulation data files.

13.5.2.2 Separate Real-World From Exercise Data

<u>Description</u>: Users require the capability to move back and forth between real world missions and simulation/exercise environments. Users will be able to delete training/simulation data at the conclusion of an exercise, while maintaining an uncorrupted current (real-world) data base.

Source Documents: AGCCS SSS, Section 3.2.1.4.7.1.2; STACCS UFD, Section 3.2.3.6.1.

Satisfaction Source: ABCS and simulation data files.

13.5.3 Training Management

<u>Description</u>: Users require a capability that supports the development of training management products.

Source Document: MCS UFD, Section 3.2.3.2.

Satisfaction Source: Training management data base files.

13.5.3.1 Manage Mission Essential Task List (METL)

<u>Description</u>: Users require a capability that assists in preparing and modifying the METL. The function will be able to clear battle tasks information from storage. Users require the capability to receive, display, store, retrieve, and print METLs. Users also require the capability to clear METL information from storage.

Source Document: MCS UFD, Section 3.2.3.2.1.

Satisfaction Source: Higher headquarters, subordinate units, and METL data base files.

13.5.3.1.1 Receive METLs

Description: Users require the capability to receive METLs.

Source Document: MCS UFD, Section 3.2.3.2.1.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.1.2 Prepare METLs

<u>Description</u>: Users require the capability to prepare a METL.

Source Document: MCS UFD, Section 3.2.3.2.1.2.

Satisfaction Source: User-defined

13.5.3.1.3 Display METLs

Description: Users require the capability to display METLs in a usable format.

Source Document: MCS UFD, Section 3.2.3.2.1.3.

Satisfaction Source: METL data base files.

13.5.3.1.4 Store METLs

Description: Users require the capability to store METLs in the METL data base.

Source Document: MCS UFD, Section 3.2.3.2.1.4.

Satisfaction Source: METL data base files.

13.5.3.1.5 Search the METL Data Base

Description: Users require the capability to search the METL data base.

Source Document: MCS UFD, Section 3.2.3.2.1.5.

Satisfaction Source: METL data base files.

13.5.3.1.6 Retrieve METL Information

<u>Description</u>: Users require the capability to retrieve METL information from the METL data base.

Source Document: MCS UFD, Section 3.2.3.2.1.6.

Satisfaction Source: METL data base files.

13.5.3.1.7 Modify METLs

Description: Users require the capability to modify a METL.

Source Document: MCS UFD, Section 3.2.3.2.1.7.

Satisfaction Source: METL data base files.

13.5.3.1.8 Distribute METLs

<u>Description</u>: Users require the capability to distribute METLs.

Source Document: MCS UFD, Section 3.2.3.2.1.8.

Satisfaction Source: METL data base files.

13.5.3.1.9 Delete METLs

<u>Description</u>: Users require the capability to delete user-selected METL information from storage.

Source Document: MCS UFD, Section 3.2.3.2.1.9.

Satisfaction Source: METL data base files.

13.5.3.1.10 Print METLs

<u>Description</u>: Users require the capability to print METLs.

Source Document: MCS UFD, Section 3.2.3.2.1.10.

Satisfaction Source: METL data base files.

13.5.3.1.11 Clear the METL Data Base

Description: Users require the capability to clear METL information from storage.

Source Document: MCS UFD, Section 3.2.3.2.1.11.

Satisfaction Source: METL data base files.

13.5.3.2 Manage Battle Tasks Lists

<u>Description</u>: Users require a capability that assists them in preparing and modifying battle tasks lists. The function will assist the user in searching the battle tasks list data base. Users require the capability to receive, display, store, retrieve, distribute, and print battle tasks lists. Users also require the capability to clear battle tasks lists information from storage.

Source Document: MCS UFD, Section 3.2.3.2.2.

Satisfaction Source: Higher headquarters, subordinate units, and battle tasks list data base files.

13.5.3.2.1 Receive Battle Tasks Lists

<u>Description</u>: Users require the capability to receive battle tasks lists.

Source Document: MCS UFD, Section 3.2.3.2.2.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.2.2 Prepare Battle Tasks Lists

<u>Description</u>: Users require the capability to prepare battle tasks lists.

Source Document: MCS UFD, Section 3.2.3.2.2.2.

Satisfaction Source: User-defined.

13.5.3.2.3 Display Battle Tasks Lists

<u>Description</u>: Users require the capability to display battle tasks lists in a usable format.

Source Document: MCS UFD, Section 3.2.3.2.2.3.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.4 Store Battle Tasks Lists

<u>Description</u>: Users require the capability to store battle task list information.

Source Document: MCS UFD, Section 3.2.3.2.2.4.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.5 Search the Battle Tasks List Data Base

Description: Users require the capability to search the battle tasks list data base.

Source Document: MCS UFD, Section 3.2.3.2.2.5.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.6 Retrieve Battle Tasks List Information

<u>Description</u>: Users require the capability to retrieve battle tasks list information.

Source Document: MCS UFD, Section 3.2.3.2.2.6.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.7 Modify Battle Tasks Lists

Description: Users require the capability to modify the battle tasks list.

Source Document: MCS UFD, Section 3.2.3.2.2.7.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.8 Distribute Battle Tasks Lists

Description: Users require the capability to distribute the battle tasks list.

Source Document: MCS UFD, Section 3.2.3.2.2.8.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.9 Delete Battle Tasks Lists

Description: Users require the capability to delete user-selected battle tasks list information.

Source Document: MCS UFD, Section 3.2.3.2.2.9.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.10 Print Battle Tasks Lists

Description: Users require the capability to print battle tasks lists.

Source Document: MCS UFD, Section 3.2.3.2.2.10.

Satisfaction Source: Battle tasks list data base files.

13.5.3.2.11 Clear the Battle Tasks Lists Data Base

<u>Description</u>: Users require the capability to clear battle tasks list information from storage.

Source Document: MCS UFD, Section 3.2.3.2.2.11.

Satisfaction Source: Battle tasks list data base files.

13.5.3.3 Manage the Commander's Training Assessment

<u>Description</u>: Users require a capability that assists them in preparing and modifying training assessments. This function will assist the user in searching the training assessment data base. Users require the capability to receive, display, store, retrieve, distribute, and print training assessments. Users also require the capability to clear training assessment information from storage.

Source Document: MCS UFD, Section 3.2.3.2.3.

<u>Satisfaction Source</u>: Higher headquarters, subordinate units, and Commander's Training Assessment data base files.

13.5.3.3.1 Receive Training Assessments

<u>Description</u>: Users require the capability to receive training assessments.

Source Document: MCS UFD, Section 3.2.3.2.3.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.5.5.3 Prepare Training Assessments

<u>Description</u>: Users require the capability to prepare training assessments.

Source Document: MCS UFD, Section 3.2.3.2.3.2.

Satisfaction Source: User-defined.

13.5.3.3.3 Display Training Assessments

Description: Users require the capability to display training assessments in a usable format.

Source Document: MCS UFD, Section 3.2.3.2.3.3.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.4 Store Training Assessment Information

<u>Description</u>: Users require the capability to store training assessment information.

Source Document: MCS UFD, Section 3.2.3.2.3.4.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.5 Search the Training Assessment Data Base

<u>Description</u>: Users require the capability to search storage for training assessment information.

Source Document: MCS UFD, Section 3.2.3.2.3.5.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.6 Retrieve Training Assessments

<u>Description</u>: Users require the capability to retrieve training assessment information from storage.

Source Document: MCS UFD, Section 3.2.3.2.3.6.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.7 Modify Training Assessments

Description: Users require the capability to modify training assessment information.

Source Document: MCS UFD, Section 3.2.3.2.3.7.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.8 Distribute Training Assessments

<u>Description</u>: Users require the capability to distribute training assessment information.

Source Document: MCS UFD, Section 3.2.3.2.3.8.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.9 Delete Training Assessments

<u>Description</u>: Users require the capability to delete user-selected training assessment information.

Source Document: MCS UFD, Section 3.2.3.2.3.9.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.10 Print Training Assessments

Description: Users require the capability to print training assessments.

Source Document: MCS UFD, Section 3.2.3.2.3.10.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.3.11 Clear the Training Assessment Data Base

<u>Description</u>: Users require the capability to clear training assessment information from storage.

Source Document: MCS UFD, Section 3.2.3.2.3.11.

Satisfaction Source: Commander's Training Assessment data base files.

13.5.3.4 Manage the Commander's Training Guidance (CTG)

<u>Description</u>: Users require a capability that assists them in preparing and modifying the commander's training guidance. This function will assist the user in searching the commander's training guidance data base. Users require the capability to receive, display, store, retrieve, distribute, and print the commander's training guidance. Users also require the capability to clear commander's training guidance information from storage.

Source Document: MCS UFD, Section 3.2.3.2.4.

Satisfaction Source: Higher headquarters, subordinate units, and CTG data base files.

13.5.3.4.1 Receive the CTG

<u>Description</u>: Users require the capability to receive CTG information.

Source Document: MCS UFD, Section 3.2.3.2.4.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.4.2 Prepare the CTG

Description: Users require the capability to prepare the CTG.

Source Document: MCS UFD, Section 3.2.3.2.4.2.

Satisfaction Source: User-defined.

13.5.3.4.3 Display the CTG

Description: Users require the capability to display CTG information in a usable format.

Source Document: MCS UFD, Section 3.2.3.2.4.3.

Satisfaction Source: CTG data base files.

13.5.3.4.4 Store CTG Information

<u>Description</u>: Users require the capability to store CTG information.

Source Document: MCS UFD, Section 3.2.3.2.4.4.

Satisfaction Source: CTG data base files.

13.5.3.4.5 Search the CTG Data Base

<u>Description</u>: Users require the capability to search the CTG Data Base.

Source Document: MCS UFD, Section 3.2.3.2.4.5.

Satisfaction Source: CTG data base files.

13.5.3.4.6 Retrieve the CTG

<u>Description</u>: Users require the capability to retrieve CTG information.

Source Document: MCS UFD, Section 3.2.3.2.4.6.

Satisfaction Source: CTG data base files.

13.5.3.4.7 Modify the CTG

<u>Description</u>: Users require the capability to modify the CTG.

Source Document: MCS UFD, Section 3.2.3.2.4.7.

Satisfaction Source: CTG data base files.

13.5.3.4.8 Distribute the CTG

<u>Description</u>: Users require the capability to distribute CTG information.

Source Document: MCS UFD, Section 3.2.3.2.4.8.

Satisfaction Source: CTG data base files.

13.5.3.4.9 Delete the CTG

Description: Users require the capability to delete user-selected CTG information from storage.

Source Document: MCS UFD, Section 3.2.3.2.4.9.

Satisfaction Source: CTG data base files.

13.5.3.4.10 Print the CTG

<u>Description</u>: Users require the capability to print the CTG.

Source Document: MCS UFD, Section 3.2.3.2.4.10.

Satisfaction Source: CTG data base files.

13.5.3.4.11 Clear the CTG Data Base

Description: Users require the capability to clear CTG information from storage.

Source Document: MCS UFD, Section 3.2.3.2.4.11.

Satisfaction Source: CTG data base files.

13.5.3.5 Manage Long-Range Planning Calendars

<u>Description</u>: Users require a capability that assists them in preparing and modifying long-range planning calendars. This function will assist the user in searching the long-range planning calendar data base. Users require the capability to receive, display, store, retrieve, distribute, and print long-range planning calendar information. Users also require the capability to clear long-range planning calendar information from storage.

Source Document: MCS UFD, Section 3.2.3.2.5.

<u>Satisfaction Source</u>: Higher headquarters, subordinate units, and CTG and Long-Range Planning Calendar data base files.

13.5.3.5.1 Receive Long-Range Planning Calendars

<u>Description</u>: Users require the capability to receive long-range planning calendar information.

Source Document: MCS UFD, Section 3.2.3.2.5.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.5.2 Prepare Long-Range Planning Calendars

<u>Description</u>: Users require the capability to prepare long-range planning calendars.

Source Document: MCS UFD, Section 3.2.3.2.5.2.

Satisfaction Source: CTG data base files.

13.5.3.5.3 Display Long-Range Planning Calendars

<u>Description</u>: Users require the capability to display long-range planning calendar information in a usable format.

Source Document: MCS UFD, Section 3.2.3.2.5.3.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.4 Store Long-Range Planning Calendars

<u>Description</u>: Users require the capability to store long-range planning calendar information.

Source Document: MCS UFD, Section 3.2.3.2.5.4.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.5 Search the Long-Range Planning Calendar Data Base

Description: Users require the capability to search the long-range planning calendar data base.

Source Document: MCS UFD, Section 3.2.3.2.5.5.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.6 Retrieve Long-Range Planning Calendars

Description: Users require the capability to retrieve long-range planning calendar information from

storage.

Source Document: MCS UFD, Section 3.2.3.2.5.6.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.7 Modify Long-Range Planning Calendars

<u>Description</u>: Users require the capability to modify long-range planning calendars.

Source Document: MCS UFD, Section 3.2.3.2.5.7.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.8 Distribute Long-Range Planning Calendars

<u>Description</u>: Users require the capability to distribute long-range planning calendar information.

Source Document: MCS UFD, Section 3.2.3.2.5.8.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.9 Delete Long-Range Planning Calendars

<u>Description</u>: Users require the capability to delete user-selected long-range planning calendar information.

Source Document: MCS UFD, Section 3.2.3.2.5.9.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.10 Print Long-Range Planning Calendars

<u>Description</u>: Users require the capability to print long-range planning calendars.

Source Document: MCS UFD, Section 3.2.3.2.5.10.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.5.11 Clear the Long-Range Planning Calendar Data Base

<u>Description</u>: Users require the capability to clear long-range planning calendar information from storage.

Source Document: MCS UFD, Section 3.2.3.2.5.11.

Satisfaction Source: Long-Range Planning Calendar data base files.

13.5.3.6 Manage Short-Range Training Guidance

<u>Description</u>: Users require a capability that assists them in preparing and modifying short-range training guidance. This function will assist the user in searching the short-range training guidance data base. Users require the capability to receive, display, store, retrieve, distribute, and print short-range training guidance. Users also require the capability to clear short-range training guidance information from storage.

Source Document: MCS UFD, Section 3.2.3.2.6.

<u>Satisfaction Source</u>: Higher headquarters, subordinate units, and CTG and Short-Range Training Guidance data base files.

13.5.3.6.1 Receive Short-Range Training Guidance

<u>Description</u>: Users require the capability to receive short-range training guidance information.

Source Document: MCS UFD, Section 3.2.3.2.6.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.6.2 Prepare Short-Range Training Guidance

Description: Users require the capability to prepare short-range training guidance.

Source Document: MCS UFD, Section 3.2.3.2.6.2.

Satisfaction Source: CTG data base files.

13.5.3.6.3 Display Short-Range Training Guidance

<u>Description</u>: Users require the capability to display short-range training guidance information in a usable format.

Source Document: MCS UFD, Section 3.2.3.2.6.3.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.4 Store Short-Range Training Guidance

Description: Users require the capability to store short-range training guidance information.

Source Document: MCS UFD, Section 3.2.3.2.6.4.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.5 Search the Short-Range Training Guidance Data Base

Description: Users require the capability to search the short-range training guidance data base.

Source Document: MCS UFD, Section 3.2.3.2.6.5.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.6 Retrieve Short-Range Training Guidance

<u>Description</u>: Users require the capability to retrieve short-range training guidance information.

Source Document: MCS UFD, Section 3.2.3.2.6.6.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.7 Modify Short-Range Training Guidance

Description: Users require the capability to modify short-range training guidance information.

Source Document: MCS UFD, Section 3.2.3.2.6.7.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.8 Distribute Short-Range Training Guidance

<u>Description</u>: Users require the capability to distribute short-range training guidance information.

Source Document: MCS UFD, Section 3.2.3.2.6.8.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.9 Delete Short-Range Training Guidance

<u>Description</u>: Users require the capability to delete user-selected short-range training guidance information.

Source Document: MCS UFD, Section 3.2.3.2.6.9.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.10 Print Short-Range Training Guidance

Description: Users require the capability to print short-range training guidance.

Source Document: MCS UFD, Section 3.2.3.2.6.10.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.6.11 Clear the Short-Range Training Guidance Data Base

<u>Description</u>: Users require the capability to clear short-range training guidance information from

Source Document: MCS UFD, Section 3.2.3.2.6.11.

Satisfaction Source: Short-Range Training Guidance data base files.

13.5.3.7 Manage Short-Range Planning Calendars

storage.

<u>Description</u>: Users require a capability that assists them in preparing and modifying short-range planning calendars. This function will assist the user in searching the short-range planning calendar data Base. Users require the capability to receive, display, store, retrieve, distribute, and print short-range planning calendars. Users also require the capability to clear short-range planning calendar information from storage.

Source Document: MCS UFD, Section 3.2.3.2.7.

<u>Satisfaction Source</u>: Higher headquarters, subordinate units, and short-range planning guidance and Short-Range Planning Calendar data base files.

13.5.3.7.1 Receive Short-Range Calendars

<u>Description</u>: Users require the capability to receive short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.1.

Satisfaction Source: Higher headquarters and subordinate units.

13.5.3.7.2 Prepare Short-Range Calendars

<u>Description</u>: Users require the capability to prepare a short-range calendar.

Source Document: MCS UFD, Section 3.2.3.2.7.2.

Satisfaction Source: Short-range training guidance data base files.

13.5.3.7.3 Display Short-Range Calendars

format.

Description: Users require the capability to display short-range calendar information in a usable

Source Document: MCS UFD, Section 3.2.3.2.7.3.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.4 Store Short-Range Calendars

<u>Description</u>: Users require the capability to store short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.4.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.5 Search the Short-Range Calendars Data Base

Description: Users require the capability to search short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.5.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.6 Retrieve Short-Range Calendars

Description: Users require the capability to retrieve short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.6.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.7 Modify Short-Range Calendars

Description: Users require the capability to modify short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.7.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.8 Distribute Short-Range Calendars

Description: Users require the capability to short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.8.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.9 Delete Short-Range Calendars

<u>Description</u>: Users require the capability to delete user-selected short-range calendar information.

Source Document: MCS UFD, Section 3.2.3.2.7.9.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.10 Print Short-Range Calendars

<u>Description</u>: Users require the capability to print short-range calendars.

Source Document: MCS UFD, Section 3.2.3.2.7.10.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.7.11 Clear the Short-Range Calendars Data Base

<u>Description</u>: Users require the capability to clear short-range calendar information from storage.

Source Document: MCS UFD, Section 3.2.3.2.7.11.

Satisfaction Source: Short-Range Planning Calendar data base files.

13.5.3.8 Manage Training Schedules

<u>Description</u>: Users require a capability that assists them in preparing and modifying training schedules. This function will assist the user in searching the training schedule data base. Users require the capability to receive, display, store, retrieve, distribute, and print training schedules. Users also require the capability to clear training schedule information from storage.

Source Document: MCS UFD, Section 3.2.3.2.8.

<u>Satisfaction Source</u>: Short-range training guidance, short-range planning calendar, and Training Schedule data base files.

13.5.3.8.1 Receive Training Schedules

<u>Description</u>: Users require the capability to receive training schedule information.

Source Document: MCS UFD, Section 3.2.3.2.8.1.

Satisfaction Source: Subordinate units.

13.5.3.8.2 Prepare Training Schedules

<u>Description</u>: Users require the capability to prepare a training schedule.

Source Document: MCS UFD, Section 3.2.3.2.8.2.

Satisfaction Source: Short-range training guidance and short-range planning calendar data base

files.

13.5.3.8.3 Display Training Schedules

Description: Users require the capability to display training schedule information in a usable

format.

Source Document: MCS UFD, Section 3.2.3.2.8.3.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.4 Store Training Schedules

<u>Description</u>: Users require the capability to store training schedule information.

Source Document: MCS UFD, Section 3.2.3.2.8.4.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.5 Search the Training Schedule Data Base

<u>Description</u>: Users require the capability to assist the user in searching training schedule data Base.

Source Document: MCS UFD, Section 3.2.3.2.8.5.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.6 Retrieve Training Schedules

<u>Description</u>: Users require the capability to retrieve training schedule information.

Source Document: MCS UFD, Section 3.2.3.2.8.6.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.7 Modify Training Schedules

Description: Users require the capability to modify training schedule information.

Source Document: MCS UFD, Section 3.2.3.2.8.7.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.8 Distribute Training Schedules

Description: Users require the capability to distribute training schedule information.

Source Document: MCS UFD, Section 3.2.3.2.8.8.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.9 Delete Training Schedules

<u>Description</u>: Users require the capability to delete user-selected training schedule information.

Source Document: MCS UFD, Section 3.2.3.2.8.9.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.10 Print Training Schedules

<u>Description</u>: Users require the capability to print training schedules.

Source Document: MCS UFD, Section 3.2.3.2.8.10.

Satisfaction Source: Training Schedule data base files.

13.5.3.8.11 Clear the Training Schedule Data Base

<u>Description</u>: Users require the capability to clear training schedule information from storage.

Source Document: MCS UFD, Section 3.2.3.2.8.11.

Satisfaction Source: Training Schedule data base files.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 14

OFFICE AUTOMATION AND BRIEFING SUPPORT FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the office automation and briefing support common user requirements.

14.1 FUNCTION NAME

Office Automation and Briefing Support

14.2 PURPOSE OF FUNCTION

This function will provide the user with standard office software applications and support in the development and presentation of briefings.

14.3 FUNCTION DESCRIPTION

The Office Automation and Briefing Support common function supports commanders and staffs (combat, combat support, and combat service support) with common commercial software applications. It will support users in managing, exchanging, and presenting information for analysis and decision making. The function includes word processing, spreadsheet, calendar/scheduler, electronic bulletin board, and automated staff journal capabilities. Using this function, users will be able to interface with the ABCS situation map (SITMAP) capability and to run MS-DOS applications. This function allows the copying/transmission of files to and from different operating systems (e.g., UNIX and DOS), applications, and peripheral devices (e.g., hard disk, DAT, CD-ROM). It will also provide users with the capability to prepare, transmit, display, and maintain briefing slides and products. The function will have the ability to import and export CGM (Computer Graphics Metafile), GIF (Graphics Interchange Format), PostScript, TIF, and PCX files. With this function, users will be able to retrieve information from the operational data base files for incorporation in briefing products. This function will also be able to incorporate live-action video sequences into briefings. It will facilitate battle command by assisting with the development of plans, orders, and briefings throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Maintain a staff journal.
- Provide basic word processing functions.
- Provide an integrated spreadsheet application.
- Provide a calendar/scheduler capability.
- Provide an electronic bulletin board.
- Provide an automated briefing application that includes slide sequencing, data base linking, graphics editing, color printing, rapid chart creation, and file operations capabilities.
- Run DOS-based software applications.
- Copy/transmit files between different operating systems, applications, and peripheral devices.
- Transfer files among individual ABCS terminals.

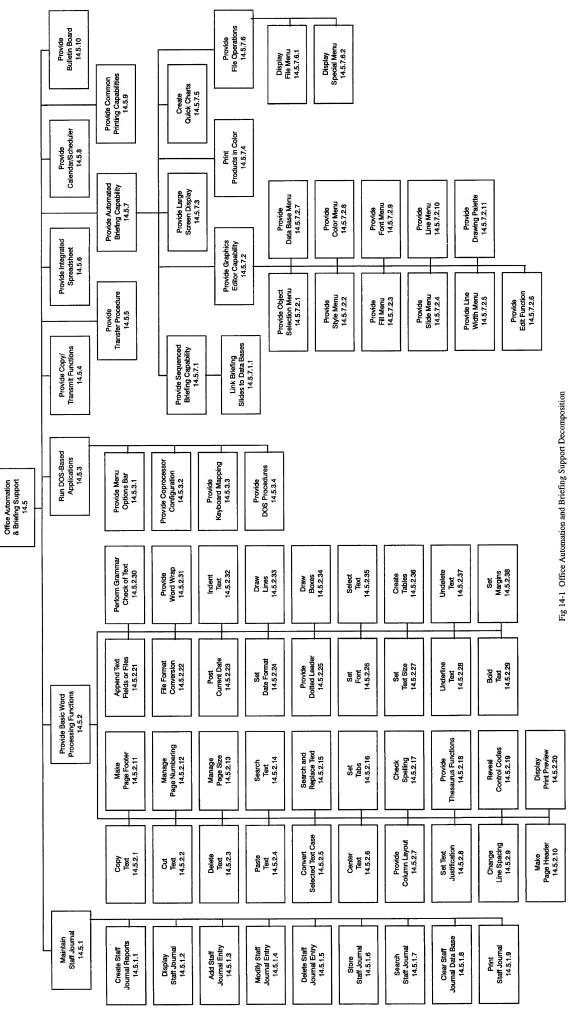
14.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.2.7.1 & 3.2.1.4.1.13.
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 3.2.1.4.2
 & 3.2.3.3.
- Standard Theater Army Command and Control System (STACCS) UFD, Sections 3.2.3.2
 & 3.2.3.5.

14.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 14-1 depicts the hierarchy of the user functional requirements.



4-4

14.5.1 Maintain Staff Journal

<u>Description</u>: Users require a capability to generate and maintain staff journal records. These records should include current daily activities and events, selected current and forecasted activities and events, and other selected subject matter (i.e., weather forecasts). The user will be able to assign classification categories to each record added to the staff journal function. The user will be able to add and query journal records by subject, date-time-group (DTG), originator, etc., and create a variety of staff journal reports.

Source Documents: MCS UFD, Sections 2.4.6.1.4 & 3.2.1.4.2; STACCS UFD, Section 3.2.3.7; AGCCS SSS, Section 3.2.1.4.1.12.

Satisfaction Source: Staff journal data base files.

14.5.1.1 Create Staff Journal Reports

<u>Description</u>: Users will abe able to create reports from the records of the activity staff journal. When creating a staff journal report, the user will have a capability to enter responses to the following prompts displayed on the screen: (1) create a report with a starting DTG, (2) create a report with an ending DTG, and (3) create a report based upon a subject and assigned classification. The user will be able to send a report to several destinations.

Source Documents: MCS UFD, Section 3.2.1.4.2.1; STACCS UFD, Section 3.2.3.7.3.

Satisfaction Source: Staff journal data base files.

14.5.1.2 Display Staff Journal

Description: This function will display the staff journal in a useable format.

Source Document: MCS UFD, Section 3.2.1.4.2.2.

Satisfaction Source: Staff journal data base files.

14.5.1.3 Add Staff Journal Entry

Description: This function will facilitate the user in adding staff journal entries by automatically posting the receipt and distribution of information and assist the user in posting other information. When adding a new journal entry, the user will have a capability to enter the following categories of information for each entry:

(1) security classification designation, (2) DTG of the report, (3) subject of report, (4) alphanumeric code of originator of report, (5) date and time of last update of a report, and (6) user identification of the person making the last update.

Source Documents: MCS UFD, Section 3.2.1.4.2.3; STACCS UFD, Section 3.2.3.7.1.

Satisfaction Source: Staff journal data base files and message handling capability.

14.5.1.4 Modify Staff Journal Entry

Description: This function will assist the user in modifying the staff journal.

Source Document: MCS UFD, Section 3.2.1.4.2.4.

Satisfaction Source: Staff journal data base files.

14.5.1.5 Delete Staff Journal Entry

Description: This function will delete user-identified staff journal entries.

Source Document: MCS UFD, Section 3.2.1.4.2.5.

Satisfaction Source: Staff journal data base files.

14.5.1.6 Store Staff Journal

Description: This function will store staff journals.

Source Document: MCS UFD, Section 3.2.1.4.2.6.

Satisfaction Source: Staff journal data base files.

14.5.1.7 Search Staff Journal

<u>Description</u>: Users will be able to query all records in the activity staff journal. When querying a journal entry, the user will have a capability to query the journal entries by the following options: (1) next (displays the next journal record), (2) previous (displays the previous journal record), (3) update (allows changes to the currently displayed journal record), (4) delete (deletes the currently displayed journal record), (5) remarks (allows the user to access the word processor to view/update the remarks), and (6) help (displays help information).

Source Documents: MCS UFD, Section 3.2.1.4.2.7; STACCS UFD, Section 3.2.3.7.2.

Satisfaction Source: Staff journal data base files.

14.5.1.8 Clear Staff Journal Data Base

<u>Description</u>: This function will clear staff journal information from storage.

Source Document: MCS UFD, Section 3.2.1.4.2.8.

Satisfaction Source: Staff journal data base files.

14.5.1.9 Print Staff Journal

<u>Description</u>: This function will print staff journals.

Source Document: MCS UFD, Section 3.2.1.4.2.9.

Satisfaction Source: Staff journal data base files.

14.5.2 Provide Basic Word Processing Functions

<u>Description</u>: This function will provide basic word processing functions to any text field in any application. The user requires the word processing application to: (1) add free text information to a message in the

mail/message processing application, and (2) add free text to a form that the user can generate in data base applications.

Source Documents: MCS UFD, Section 3.2.3.3; STACCS UFD, Section 3.2.3.5.4; AGCCS SSS, Section 3.2.1.2.7.1.4.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined.

14.5.2.1 Copy Text

<u>Description</u>: This function will copy user-selected text and store the text in temporary storage (clipboard).

Source Document: MCS UFD, Section 3.2.3.3.1.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.2 Cut Text

<u>Description</u>: This function will remove user-selected text and store the text in temporary storage (clipboard).

Source Document: MCS UFD, Section 3.2.3.3.2.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.3 Delete Text

Description: This function will delete user-selected text.

Source Document: MCS UFD, Section 3.2.3.3.3.

14.5.2.4 Paste Text

<u>Description</u>: This function will paste text stored in temporary storage into a text field of the original application/file or a different application/file.

Source Document: MCS UFD, Section 3.2.3.3.4.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.5 Convert Selected Text Case

<u>Description</u>: This function will convert user-selected text to all upper case letters, all lowercase letters, or only the first letter of a word to upper case and the remaining portion of the word to lower case.

Source Document: MCS UFD, Section 3.2.3.3.5.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.6 Center Text

<u>Description</u>: This function will center the text to a page or column.

Source Document: MCS UFD, Section 3.2.3.3.6.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.7 Provide Column Layout

<u>Description</u>: This function will divide text into column format. Column formats will include newspaper format and parallel columns format.

Source Document: MCS UFD, Section 3.2.3.3.7.

14.5.2.8 Set Text Justification

<u>Description</u>: This function will set a line, page, user-selected text or document to left or right justify.

Source Document: MCS UFD, Section 3.2.3.3.8.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.9 Change Line Spacing

Description: This function will set a line, page, user-selected text or document line spacing.

Source Document: MCS UFD, Section 3.2.3.3.9.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.10 Make Page Header

Description: This function will provide the user the capability of making page headers.

Source Document: MCS UFD, Section 3.2.3.3.10.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.11 Make Page Footer

Description: This function will provide the user the capability of making page footers.

Source Document: MCS UFD, Section 3.2.3.3.11.

14.5.2.12 Manage Page Numbering

<u>Description</u>: This function will provide the user the capability of numbering pages. This function will provide the user the capability of positioning page numbers on a page, designating the page number accompanying text, designating page number format, and the pages to be numbered.

Source Document: MCS UFD, Section 3.2.3.3.12.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.13 Manage Page Size

<u>Description</u>: This function will provide the user the capability of identifying the size of the page. The page size selection will include, but not limited to, 11.69" x 8.27" (landscape), 8.27" x 11.69", 10.12" x 7.17" (landscape), 7.17" x 10.12, 14" x 8.5" (landscape), 8.5" x 14", 11" x 8.5" (landscape), and 8.5" x 11".

Source Document: MCS UFD, Section 3.2.3.3.13.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.14 Search Text

<u>Description</u>: This function will provide the user the capability of searching text to find user-selected text, including control characters.

Source Document: MCS UFD, Section 3.2.3.3.14.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.15 Search and Replace Text

<u>Description</u>: This function will provide the user the capability of searching text to find user-selected text, including control characters, and replacing the found text with selected replacement text, including control characters.

Source Document: MCS UFD, Section 3.2.3.3.15.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.16 Set Tabs

Description: This function will provide the user the capability of setting tabs.

Source Document: MCS UFD, Section 3.2.3.3.16.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.17 Check Spelling

<u>Description</u>: This function will check the spelling of words in a page, user-selected text, or document. It will provide a list of possible correct spellings for the user to choose from. This capability will provide both a standard dictionary and a personal dictionary that can be edited by the individual user. The spell checker will interoperate with the word processor and the message generation application.

Source Documents: MCS UFD, Section 3.2.3.3.17; STACCS UFD, Section 3.2.3.5.5.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.18 Provide Thesaurus Functions

Description: This function will provide the user a list of synonyms and antonyms.

Source Document: MCS UFD, Section 3.2.3.3.18.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.19 Reveal Control Codes

<u>Description</u>: This function will provide the user the capability of displaying control characters.

Source Document: MCS UFD, Section 3.2.3.3.19.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.20 Display Print Preview

<u>Description</u>: This function will display a product as it would appear when printed.

Source Document: MCS UFD, Section 3.2.3.3.20.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.21 Append Text Fields or Files

<u>Description</u>: This function will append text files to the end of other text files.

Source Document: MCS UFD, Section 3.2.3.3.21.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.22 File Format Conversion

<u>Description</u>: This function will convert text files to or from the following formats (at a minimum): Wordperfect, Word for Windows, Multimate, Wordstar, DCA, and ASCII.

Source Document: MCS UFD, Section 3.2.3.3.22.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.23 Post Current Date

<u>Description</u>: This function will allow the user to post the current date in a text field.

Source Document: MCS UFD, Section 3.2.3.3.23.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.24 Set Date Format

<u>Description</u>: This function will provide the user the capability of setting the date format to be used. This function will allow the user to set the date in the following formats: November 30, 1990; Nov. 30, 1990; 11/30/90; 30/11/90; 30-11-90; 11-30-90; 30 Nov 90 or 30Nov90.

Source Document: MCS UFD, Section 3.2.3.3.24.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.25 Provide Dotted Leader

Description: This function will allow the user to fill in tabbed space with a dotted line.

Source Document: MCS UFD, Section 3.2.3.3.25.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.26 Set Font

<u>Description</u>: This function will provide the user with the capability of setting the font type of selected text or a document.

Source Document: MCS UFD, Section 3.2.3.3.26.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.27 Set Text Size

<u>Description</u>: This function will provide the user with the capability of setting the text size of selected text or a document.

Source Document: MCS UFD, Section 3.2.3.3.27.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.28 Underline Text

Description: This function will provide the user with the capability of underlining selected text.

Source Document: MCS UFD, Section 3.2.3.3.28.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.29 Bold Text

<u>Description</u>: This function will provide the user with the capability of making selected text bold.

Source Document: MCS UFD, Section 3.2.3.3.29.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.30 Perform Grammar Check of Text

<u>Description</u>: This function will provide the user with the capability of checking the grammar of selected text or document.

Source Document: MCS UFD, Section 3.2.3.3.30.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.31 Provide Word Wrap

line.

<u>Description</u>: This function will ensure that words that are too long for a line are moved to the next

Source Document: MCS UFD, Section 3.2.3.3.31.

14.5.2.32 Indent Text

<u>Description</u>: This function will provide the user with the capability of indenting text until a hard return character is inserted.

Source Document: MCS UFD, Section 3.2.3.3.32.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.33 Draw Lines

Description: This function will provide the user with the capability of drawing lines in text fields.

Source Document: MCS UFD, Section 3.2.3.3.33.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.34 Draw Boxes

<u>Description</u>: This function will provide the user with the capability of drawing boxes in text fields.

Source Document: MCS UFD, Section 3.2.3.3.34.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined..

14.5.2.35 Select Text

<u>Description</u>: This function will provide the user with the capability of selecting text upon which other operations can be performed.

Source Document: MCS UFD, Section 3.2.3.3.35.

14.5.2.36 Create Tables

Description: This function will assist the user in creating tables.

Source Document: MCS UFD, Section 3.2.3.3.36.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.37 Undelete Text

<u>Description</u>: This function will provide the user with the capability of undeleting deleted text.

Source Document: MCS UFD, Section 3.2.3.3.37.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.2.38 Set Margins

version.

Description: This function will provide the user with the capability to set margins.

Source Document: None. Added at request of TSM Battlefield Computers.

Satisfaction Source: ABCS data base files, system message handling capability, and user-defined...

14.5.3 Run DOS-based Applications

<u>Description</u>: Users will be able to run DOS-based applications that work with the most recent DOS

Source Documents: STACCS UFD, Section 3.2.3.5.1; AGCCS SSS, Section 3.2.1.2.7.1.1.

Satisfaction Source: System software.

14.5.3.1 Provide Menu Options Bar

Description: Users will have the capability to manipulate slides and the objects drawn on them. Users need to be able to access the following type of functions: (1) select existing files or create new ones, (2) view up to nine slides at one time, (3) read an existing slide from disk, (4) close an active slide layer and remove its objects from the display, (5) save changes made to an active slide, (6) save the file currently being edited to a different file name, (7) merge the objects of a slide on disk with the objects of a slide currently being edited on the desktop, (8) send slides to another location, (9) delete editor layers within the editor, (10) load a map into the editor as a raster image that can then be used as a background for a slide, (11) import military symbols stored in the symbol library into the editor and use them in a slide, (12) bring images from other sources into the editor, (13) scan images on a scanner and bring them into the editor, (14) output the current slide to any postscript printer, as either color or black and white, and (15) export the current slide in a file format other than that used by the Common Graphics Editor.

Source Document: STACCS UFD, Section 3.2.3.5.1.1.

Satisfaction Source: System software and user-defined.

14.5.3.2 Provide Coprocessor Configuration

<u>Description</u>: Users will have the capability to access and utilize the following PC configuration: (1) PC AT processor, (2) an IBM PC AT keyboard, (3) an Enhanced Graphics Adapter, (4) 640 Kbytes of standard system memory, (5) three line printer parallel interface ports, (6) four RS-232C serial interface ports, and (7) a Microsoft serial mouse.

Source Document: STACCS UFD, Section 3.2.3.5.1.2.

Satisfaction Source: System software.

14.5.3.3 Provide Keyboard Mapping

<u>Description</u>: Users will be able to use the HP keyboard as though it were a standard IBM compatible PC AT keyboard. The HP_UX keys should be mapped to perform as a PC AT keyboard.

Source Document: STACCS UFD, Section 3.2.3.5.1.3.

Satisfaction Source: System software.

14.5.3.4 Provide DOS Procedures

<u>Description</u>: Users will have the capability to install DOS, copy DOS files, and to access DOS/HP-UX files.

Source Document: STACCS UFD, Section 3.2.3.5.1.4.

Satisfaction Source: System software.

14.5.4 Provide Copy/Transmit Functions

Description: Users require the capability to copy and/or transmit files to and from different operating system environments (e.g. UNIX and DOS), applications (word processor, spreadsheet, etc.), and peripheral devices (e.g. hard disk, DAT, CD-ROM, etc.). This function will have the following capabilities: (1) copy DOS file to word processing application, (2) copy DOS files to tape, (3) copy word processing files to tape, (4) copy word processing files to DOS, (5) copy message files to DOS, (6) copy message files to word processing application, (7) copy message files to tape, (8) transmit DOS file, (9) transmit word processing file, (10) transmit message file, (11) display word processing/DOS file transfer log, (12) restore DOS directory, (13) restore word processing directory, and (14) restore message services directory.

Source Documents: STACCS UFD, Section 3.2.3.5.2; AGCCS SSS, Section 3.2.1.2.7.1.2.

Satisfaction Source: System software and user-defined.

14.5.5 Provide Transfer Procedure

<u>Description</u>: Users will have the capability to transfer files (e.g. UNIX as well as DOS files) between and among all ABCS workstations.

Source Documents: STACCS UFD, Section 3.2.3.5.3; AGCCS SSS, Section 3.2.1.2.7.1.3.

Satisfaction Source: System software and user-defined.

14.5.6 Provide Integrated Spreadsheet

<u>Description</u>: Users require a standardized capability to create and use an integrated spreadsheet. The spreadsheet will be able to import data from the data base and decision support applications, and to export data to them without loss of data integrity. The spreadsheet will also interoperate with the word processing application.

Source Documents: STACCS UFD, Section 3.2.3.5.6; AGCCS SSS, Section 3.2.1.2.7.1.5.

Satisfaction Source: ABCS data base files and user-defined.

14.5.7 Provide Automated Briefing Capability

Description: This function will provide the capability to create automated briefing packages using data/information found within the system (databased or displayable on map displays). Users require a capability to prepare briefing slides, to arrange slides in a specific order, and to display the ordered slides as a briefing. Users will be able to perform the full range of associated file (slide) maintenance functions, to include moving, copying, editing, and deleting files. Users will be able to transfer files to other users over the ABCS network, and to save. Users also need a capability to import and export CGM (Computer Graphics Metafile), GIF (Graphics Interchange Format), PostScript, TIF, PCX files,; and to import map background by selecting the map sheet and bounding coordinates. Users need a capability to add live action video sequences to briefings. The automated briefing support will contain the following characteristics: (1) SOP defined briefing formats will be automatically updated at time intervals specified by the user with embedded text links into both standard and nonstandard briefing formats, (2) users will be able to modify the standard briefing formats at any time, (3) users will be abel to create nonstandard briefing slides at any time, (4) users will be able to incorporate drawing/art capabilities, and the ability to manipulate text and font sizes, (5) users will be able to provide the capability to import/merge images from other applications, including commercial office applications, and provide automated drawing tools, including freehand drawing capability, (6) users will be able to merge standard briefing formats with nonstandard briefing slides to create briefing folders, including merged situation map "snapshots" and/or sketchpad sketches into the briefing folder, modify situation map "snapshots" and/or sketchpad sketches after merging them into the briefing folder, and transmit briefing folders or individual briefing slides to other FLC-SW users as specified by the user, (7) display briefing slides in a user-controlled order, redisplay any previous slide, display/view multiple briefing slides on one display screen by reducing the size of the briefing slides, and print briefing folders or individual briefing slides on hard copy, and (8) Multiple Workstation Simultaneous Review of draft/proposed documents, briefing packages, messages, and OPLANs/OPORDs. This capability will be used as a staff coordination tool within a CP. Each reviewing workstation will have a live comment capability simultaneously providing comments to the other reviewing workstations.

Source Documents: MCS UFD, Section 2.4.6.2.3; STACCS UFD, Section 3.2.3.2; AGCCS SSS, Section 3.2.1.4.1.13.

Satisfaction Source: ABCS data base files, system software, and user-defined.

14.5.7.1 Provide Sequenced Briefing Capability

Description: Users will have a capability to create and manage briefings. There will be a listing of available briefings from which the user can select for editing or display. Each complete briefing will have the following types of information associated with it: briefing name, description of the briefing, classification, date/time prepared, intended audience, and estimated presentation time. Once selected for editing, the user will have the capability to display the briefing, send the briefing across the network, iconify the briefing, order and reorder the briefing, provide briefing transition points (to other places in the briefing or to another briefing), import MOTIF screens into the briefing, display live action video in the briefing, add to and remove slides from the briefing by point and click, add briefing notes to each of the slides, print the briefing or a briefing list (including briefing details described above), and determine the transition and timing of the transition to the next slide. The display of the slides should be standardized to display the same information during the briefing. Each slide will display the following information: classification (top and bottom), slide number and name, slide transition buttons (next slide, pause, fast forward, fast reverse), and if a video display, the video play buttons (rewind, reverse, pause, forward, fast forward).

Source Documents: STACCS UFD, Section 3.2.3.2.1; AGCCS SSS, Section 3.2.1.4.1.13.1.

Satisfaction Source: System software and user-defined.

14.5.7.1.1 Link Briefing Slides to Data Bases

<u>Description</u>: Users will be able to dynamically link selected data on briefing slides to information located at various places in the ABCS data bases. Users will be able to designate the data table that contains the information and the slide will be automatically updated. Users will be able to lock and unlock the data at a specific time for the duration of the briefing.

Source Documents: STACCS UFD, Section 3.2.3.2.1.1; AGCCS SSS, Section 3.2.1.4.1.13.4.

Satisfaction Source: ABCS data base files, system software, and user-defined.

14.5.7.2 Provide Graphics Editor Capability

<u>Description</u>: Users will have the capability to use a graphics editor for creating a new slide, or for editing an existing slide.

Source Documents: STACCS UFD, Section 3.2.3.2.2; AGCCS SSS, Section 3.2.1.4.1.13.2.

Satisfaction Source: System software and user-defined.

14.5.7.2.1 Provide Object Selection Menu

Description: Users require easy access to graphic tools for both creating and editing objects contained in the files (slides). Standard features that will be provided are: (1) move an object, (2) resize an object, (3) change object attributes (fill style, line style, line width, foreground and background color and for text objects, font, font size, font style, and font alignment), (4) create a text object, (5) create lines, (6) create polygon and polyline objects, (7) create rectangles, (8) create arcs and circles, (9) create pencil item objects (irregularly shaped items), (10) link an object's characteristics to a data base or file field, (11) align an object, and (12) import selected symbols from the standard reference files library (see Section 15). When an object is selected by a user, this action will generate a property sheet window that gives the user all of the changeable characteristics for that object within one window. Users will have the capability to change any of these characteristics by clicking on the changeable properties. If the object has an active data link, this information will also be displayed.

Source Document: STACCS UFD, Section 3.2.3.2.2.1.

Satisfaction Source: System software and user-defined.

14.5.7.2.2 Provide Style Menu

<u>Description</u>: Users will have the capability to select different text styles from a style menu, and to position text on the screen. Users will be able to select bold, italic, and underline text styles, and to choose from font sizes that range from 8-points to 24-points. The fonts will be fully rescalable by selecting and resizing the text

to the desired size or entering an appropriate font size. Users will be able to automatically position the text to the left, to the center, or to the right, or to full justification. Grouped text objects will be aligned accordingly. Text will be able to be selected and rotated 360 degrees without distortion of the text. Text can be grouped with an object (i.e., arc, polyline, etc.) and can then be realigned to follow the general outline of that object. Users will also be able to position text to left, center, right, top, or bottom of the screen.

Source Document: STACCS UFD, Section 3.2.3.2.2.2.

Satisfaction Source: System software and user-defined.

14.5.7.2.3 Provide Fill Menu

<u>Description</u>: Users will have the capability to make an object partially transparent so that what is behind the object is also visible, and to combine colors from the palette of 16 colors to differentiate each object from all other objects on the screen.

Source Document: STACCS UFD, Section 3.2.3.2.2.3.

Satisfaction Source: System software and user-defined.

14.5.7.2.4 Provide Slide Menu

<u>Description</u>: Users will have the capability to affect the environment in which slides are created and edited. Minimum essential attributes are: (1) background color, (2) turn grid on and off, (3) activate/deactivate snap-to-grid, (4) grid interval, (5) edit mode, (6) view mode, and (7) layer to front/layer to back.

Source Document: STACCS UFD, Section 3.2.3.2.2.4

Satisfaction Source: System software and user-defined.

14.5.7.2.5 Provide Line Width Menu

<u>Description</u>: Users will have the capability to set the line thickness for unfilled objects. A menu will be available that contains a list of line thickness selections, such that when a particular width is selected, the object will be redrawn automatically using the new width.

Source Document: STACCS UFD, Section 3.2.3.2.2.5.

Satisfaction Source: System software and user-defined.

14.5.7.2.6 Provide Edit Function

Description: Users will have the capability to edit slides in a variety of ways. The minimum essential edit capabilities include removing selected items from the display and placing them in the paste buffer for retrieval by the paste option; copying selected objects and placing them in the paste buffer; recovering objects stored in the paste buffer; removing an object or group of objects from the display; copying all selected items to a location slightly away from itself on the screen; altering the shape of a selected object, such as polyline/polygon/pencil and rectangle items, arc/circle, raster items, and text items; and adding text or editing text that already exists. Users will also be able to rotate an object through 360 degrees; align selected objects either to the left, right, top, bottom, center, horizontal center, vertical center, or page center; flip an object vertically or horizontally; space selected objects equally either horizontally or vertically; zoom in to view a user selected area of the screen; and undo last change.

Source Document: STACCS UFD, Section 3.2.3.2.2.6.

Satisfaction Source: System software and user-defined.

14.5.7.2.7 Provide Data Base Menu

<u>Description</u>: Users will have the capability to tie objects in the editor to any value in any file contained in the data base. The attributes that users will be able to select include location, color, fill style, line width, text, and points.

Source Document: STACCS UFD, Section 3.2.3.2.2.7.

Satisfaction Source: System software and user-defined.

14.5.7.2.8 Provide Color Menu

<u>Description</u>: Users will have the capability to set the foreground and background colors of any newly created or selected objects. These functions will be available, both when creating a new slide and when editing an existing slide.

Source Document: STACCS UFD, Section 3.2.3.2.2.8.

Satisfaction Source: System software and user-defined.

14.5.7.2.9 Provide Font Menu

<u>Description</u>: Users will have the capability to select a font for a text object from a list of fonts. Users should be able to change fonts automatically by selecting a new font from a font menu.

Source Document: STACCS UFD, Section 3.2.3.2.2.9.

Satisfaction Source: System software and user-defined.

14.5.7.2.10 Provide Line Menu

Description: Users will have the capability to access a line menu. This menu should consist of the line curve area, and the line style area. The line curve area should consist of three options: straight, curved, and B spline. The straight option should be the standard; it will draw a line segment between each two points in a line. The curved option will draw an approximation of a curve that will pass through every point selected. The B spline will draw a line in which the turning points of the curve are at the center points of each line segment. The line style menu will provide the user with various military line styles for specialized applications. Users will also have the capability to select a line attribute that has no arrowheads, or arrowheads at one end or both ends. In addition, the user can select either a solid line (default), a dashed line, or a dotted line.

Source Document: STACCS UFD, Section 3.2.3.2.2.10.

Satisfaction Source: System software and user-defined.

14.5.7.2.11 Provide Drawing Palette

<u>Description</u>: Users requires a drawing palette while using the graphics editor. The capabilities required include: undo, duplicate, cut, paste, align, space, get symbols, front, back, group, and ungroup.

Source Document: STACCS UFD, Section 3.2.3.2.2.11.

Satisfaction Source: System software and user-defined.

Provide Large Screen Display 14.5.7.3

Description: Users, in selected operating locations, require the capability to display information

on a large screen. The large screen display will provide variable size, multicolor displays of information stored in

the host ABCS device. Information requiring display includes textual material, decision graphics, and operational

graphics with an electronic map background. Operational graphic displays will be provided at standard scales and

will automatically adjust to the selected map background scale. Viewing resolution of the display for both graphics

and text will be such that audiences can distinguish image characteristics from various viewing aspect angles at least

as well as if viewing a paper map with acetate overlays from the same perspectives and under the same lighting

conditions.

Source Document: STACCS UFD, Section 3.2.3.2.4.

Satisfaction Source: System software and user-defined.

Print Products in Color 14.5.7.4

Description: Users require the capability to print products in color. Such products include maps,

in the basic colors of black, green, blue, brown, and red; and color briefing slides.

Source Document: STACCS UFD, Section 3.2.3.2.5.

Satisfaction Source: System software and user-defined.

Create Quick Charts 14.5.7.5

Description: Users will have the capability to create a limited number of commonly used decision

charts. The charts supported are: Bar Chart, Horizontal Bar, Horizontal Stacked Bar, Area Chart, Pie Chart, Pie

Chart (Percentage), Line Chart, Point/Scatter Chart, Time-line (horizontal stacked bar with time scale as X axis),

Status chart (bubblegum chart), organizational chart, multiple column chart, title chart, bullet chart, and table chart.

Each chart will have an associated data sheet that the user can fill in with data manually, or link the data cell to a

data base/file field or ad hoc query result.

14-26

Source Document: STACCS UFD, Section 3.2.3.2.6.

Satisfaction Source: ABCS data base files, system software, and user-defined.

14.5.7.6 Provide File Operations

<u>Description</u>: Users will be able to perform the following file functions: (1) create a new slide, (2) edit an existing slide, (3) create a new folder, (4) copy a file, (5) move a file, (6) rename a file, (7) save a file, (8) delete a file, (9) print a file, (10) send a file across the network, (11) copy a file to or from a device (floppy disk, DAT, tape), and (12) format a floppy disk (DOS, UNIX). Users will have the capability to import/export color Graphics Metafile files.

Source Documents: STACCS UFD, Section 3.2.3.2.3; AGCCS SSS, Section 3.2.1.4.1.13.3.

Satisfaction Source: ABCS data base files, system software, and user-defined.

14.5.7.6.1 Display File Menu

Description: Users will have the capability to invoke the Common Graphics Editor (CGE) to create a new slide. Further, the user will be able to edit existing slides. Users will be able to execute the following commands from the keyboard or by use of a mouse: (1) create a new folder (this function will create a dialog box on the screen that will allow the user to name the new folder or cancel the current action); (2) copy a file (this function will allow the user to copy a file to a specified folder; and should allow the user to copy more than one file at a time); (3) move a file from one folder to another folder; (4) rename an existing file; (5) remove a slide or folder from the system; and (6) print selected files.

Source Document: STACCS UFD, Section 3.2.3.2.3.1.

Satisfaction Source: System software and user-defined.

14.5.7.6.2 Display Special Menu

<u>Description</u>: Users will have the capability to automatically store an associated text message with each file. In addition, the user needs to be able to perform the following text functions: (1) alphabetize the files in a folder, (2) create a new story file, (3) take slides created in the editor and order them for a presentation, (4)

display the slides as they were ordered in the story editor, and to initiate and change the time interval used in time display mode, (5) send a file, group of files, or folder across the ABCS network to a remote host or group of hosts, (6) copy a selected file to one of the devices attached to the computer, (7) copy files from a floppy disk and place them in a temporary folder and then display the folder, and (8) format a new floppy disk.

Source Document: STACCS UFD, Section 3.2.3.2.3.2.

Satisfaction Source: System software and user-defined.

14.5.8 Provide Calendar/Scheduler

<u>Description</u>: Users require a calendar/scheduling capability to promote enhanced coordination among staff groups, both horizontally and vertically, through automating the development of group and/or command-level schedules and timely event/activity advance notifications/alerts. The calendar will be available to all authorized applications users for information and to authorized administrators for maintenance.

Source Document: AGCCS SSS, Section 3.2.1.2.7.1.7.

Satisfaction Source: System software and user-defined.

14.5.9 Provide Common Printing Capabilities

<u>Description</u>: Users require the capability to print user-selected files, screens, and windows from any application or utility screen. This capability will include printing both text and graphics in black and white and in color.

Source Document: AGCCS SSS, Section 3.2.1.2.7.1.6.

Satisfaction Source: System software and user-defined.

14.5.10 Provide Bulletin Board

<u>Description</u>: Users require an electronic bulletin board capability to promote wider dissemination of information of general interest and of interest to specific groups. The bulletin board will be available to all authorized application users for information and to authorized administrators for maintenance.

Source Document: AGCCS SSS, Section 3.2.1.2.7.1.8.

Satisfaction Source: System software and user-defined.

LAYER 4 COMMON CORE APPLICATIONS

SECTION 15

STANDARD REFERENCE FILES FUNCTIONAL DECOMPOSITION

This section describes the decomposition of the standard reference files common user requirements.

15.1 FUNCTION NAME

Standard Reference Files

15.2 PURPOSE OF FUNCTION

This function will provide the user with an automated reference library capability.

15.3 FUNCTION DESCRIPTION

The Standard Reference Files common function supports commanders and staffs (combat, combat support, and combat service support) with a library of commonly used reference documents and publications. It will provide users with a research information source for general planning purposes. The library will include Joint Operation Planning and Execution System (JOPES) Standard Reference Files, the CIA Worldbook, a standard reference encyclopedia, a geographical index, the force's standing operating procedures (SOP), ABCS user's manuals, and on-line threat and force doctrinal publications. It may also include theater-unique reference data. Additionally, this function has the capability to translate thirteen languages into English. This function will facilitate battle command by providing commanders and staffs with important planning information throughout the force projection cycle. Its products will enhance the planning and execution of operations.

This function includes the capability to:

- Electronically search the library for information.
- Refine the information search to achieve increasing levels of detail.

- Provide a graphical user interface between this function and the ABCS data bases.
- Create information summaries.
- Add and update information in the library.
- Retrieve information using key words and/or phrases.

15.4 REFERENCES

The following documents provided the user requirements for this function:

- Army Global Command and Control System (AGCCS) System/Segment Specification (SSS), Sections 3.2.1.4.19 & 3.2.1.4.22
- Maneuver Control System (MCS) User Functional Description (UFD), Sections 3.2.1.1.5.7, 3.2.1.1.13, 3.2.1.3.2 & 3.2.3.4
- Standard Theater Army Command and Control System (STACCS) UFD, Sections 3.2.1.5
 3.2.3.4.

15.5 FUNCTIONAL REQUIREMENTS

This subsection lists and describes the specific user requirements for this function. For each requirement, it lists the requirement description, its source document(s) and section(s), and the source for satisfying its information requirement(s). Figure 15-1 depicts the hierarchy of the user functional requirements.

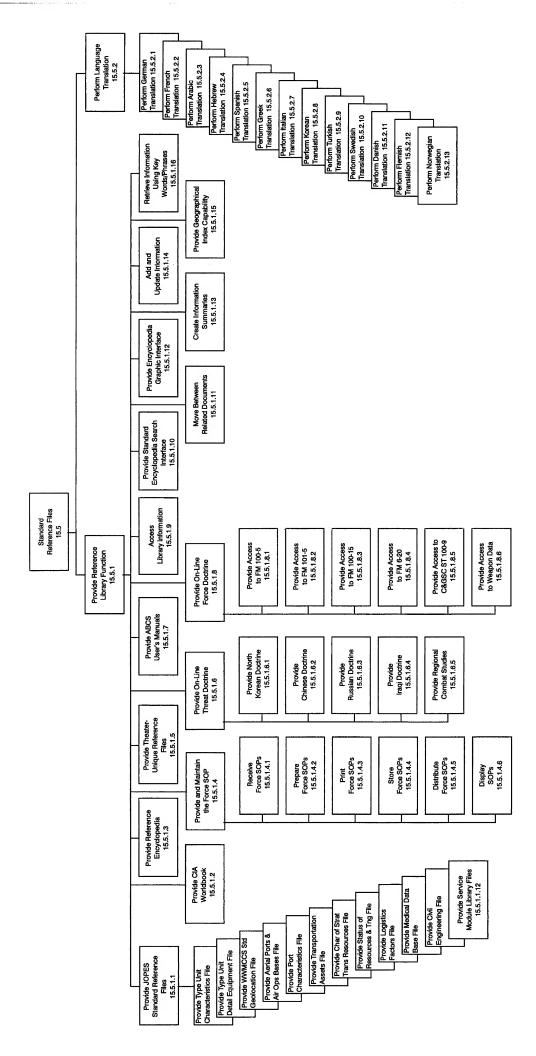


Fig 15-1 Standard Reference Files Decomposition

15.5.1 Provide Reference Library Function

<u>Description</u>: Users require a capability to research information from many diverse sources and use it for general planning purposes. Information includes internal, external, baseline, and user-provided reference data about such things as world airport and seaport characteristics and capacities, geographic locations, planning factors, and type unit requirement data. The application will include the JOPES Standard Reference Files; the CIA Worldbook; a standard reference encyclopedia (such as *Encyclopedia Britannica*); the force's SOP; on-line threat and force doctrinal publications; and ABCS user's manuals. Other data may include theater-unique user-created reference files. The application will use a graphical interface to search for and select data, and be able to retrieve data from any storage medium, including CD-ROM and digital tape.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: Reference library data base files.

15.5.1.1 Provide JOPES Standard Reference Files

Description: Users require the capability to store, process, and maintain the JOPES Standard Reference Files (SRF). SRF functionality, primarily joint files, are available to all supported headquarters and constitute integral parts of most of these activities. Other related files which are not specifically part of SRF will be included in this functional area for ease of analysis, reference, and utilization. The JOPES SRF will include, as a minimum, Type Unit Characteristics File (TUCHA), Type Unit Detail Equipment File (TUDET), Worldwide Military Command and Control System (WWMCCS) Standard Geolocation File (GEOFILE), Aerial Ports and Air Operations Bases File (APORTS), Port Characteristics File (PORTS), Transportation Assets File (ASSETS), Characteristics of Strategic Transportation Resources File (CHSTR), Status of Resources and Training File (SORTS), Logistics Factors File (LFF), Medical Data Base (MED DB), Civil Engineering File (CEF) and Service Force Module Library (SVC FM LIB).

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: JOPES Standard Reference Files data base.

15.5.1.1.1 Provide TUCHA File

Description: Users require the capability to access the Type Unit Characteristics File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: TUCHA File data base.

15.5.1.1.2 Provide TUDET File

<u>Description</u>: Users require the capability to access the Type Unit Equipment File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: TUDET File data base.

15.5.1.1.3 Provide WWMCCS Standard Geolocation File

<u>Description</u>: Users require the capability to access the WWMCCS Standard Geolocation File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: WWMCCS Standard Geolocation File data base.

15.5.1.1.4 Provide APORTS File

<u>Description</u>: Users require the capability to access the Aerial Ports and Air Operations Bases File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: APORTS File data base.

15.5.1.1.5 Provide PORTS File

<u>Description</u>: Users require the capability to access the Ports Characteristics File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: PORTS File data base.

15.5.1.1.6 Provide ASSETS File

<u>Description</u>: Users require the capability to access the Transportation Assets File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: ASSETS File data base.

15.5.1.1.7 Provide CHSTR File

<u>Description</u>: Users require the capability to access the Characteristics of Strategic Transportation Resources File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: CHSTR File data base.

15.5.1.1.8 Provide SORTS File

<u>Description</u>: Users require the capability to access the Status of Resources and Training File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: SORTS File data base.

15.5.1.1.9 Provide LFF File

<u>Description</u>: Users require the capability to access the Logistics Factors File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: LFF File data base.

15.5.1.1.10 Provide MED DB File

Description: Users require the capability to access the Medical Data Base File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: MED DB File data base.

15.5.1.1.11 Provide CEF File

Description: Users require the capability to access the Civil Engineering File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: CEF File data base.

15.5.1.1.12 Provide SVC FM LIB File

Description: Users require the capability to access the Service Force Module Library File.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: SVC FM LIB File data base.

15.5.1.2 Provide CIA Worldbook

<u>Description</u>: Users require the capability to research information from the CIA Worldbook for general planning purposes.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: CIA Worldbook data base.

15.5.1.3 Provide Reference Encyclopedia

<u>Description</u>: Users require the capability to research information from a standard reference encyclopedia (such as the *Encyclopedia Britannica*) for general planning purposes.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: Reference encyclopedia data base.

15.5.1.4 Provide and Maintain the Force Standing Operating Procedures (SOP)

Description: Users require the capability to maintain the force SOP.

Source Document: MCS UFD, Section 3.2.1.3.2.

Satisfaction Source: SOP data base files.

15.5.1.4.1 Receive Force SOPs

<u>Description</u>: Users require the capability to receive SOPs from higher headquarters, other units, and/or the G-3/S-3 staff section.

Source Document: MCS UFD, Section 3.2.1.3.2.1.

Satisfaction Source: Higher headquarters and other units.

15.5.1.4.2 Prepare Force SOPs

Description: Users require the capability to prepare an SOP.

Source Document: MCS UFD, Section 3.2.1.3.2.2.

Satisfaction Source: User-defined.

15.5.1.4.3 Print Force SOPs

<u>Description</u>: Users require the capability to print SOPs.

Source Document: MCS UFD, Section 3.2.1.3.2.3.

Satisfaction Source: SOP data base files.

15.5.1.4.4 Store Force SOPs

<u>Description</u>: Users require the capability to store SOPs.

Source Document: MCS UFD, Section 3.2.1.3.2.4.

Satisfaction Source: SOP data base files.

15.5.1.4.5 Distribute Force SOPs

<u>Description</u>: Users require the capability to distribute SOPs and updates.

Source Document: MCS UFD, Section 3.2.1.3.2.5.

Satisfaction Source: SOP data base files.

15.5.1.4.6 Display SOPs

<u>Description</u>: Users require the capability to display SOPs in a usable format.

Source Document: MCS UFD, Section 3.2.1.3.2.6.

Satisfaction Source: SOP data base files.

15.5.1.5 Provide Theater-Unique Reference Files

<u>Description</u>: Users require the capability to research information from theater-unique user-created reference files for general planning purposes.

Source Documents: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: Theater-unique reference files data base.

15.5.1.6 Provide On-Line Threat Doctrine

<u>Description</u>: Users require the capability to access on-line threat doctrine, as required.

Source Document: MCS UFD, Section 3.2.1.1.5.7.

Satisfaction Source: Threat doctrine data base files.

15.5.1.6.1 Provide North Korean Doctrine

<u>Description</u>: North Korean doctrine is available on-line.

Source Document: MCS UFD, Section 3.2.1.1.5.7.1.

Satisfaction Source: Threat doctrine data base files.

15.5.1.6.2 Provide Chinese Doctrine

<u>Description</u>: Chinese doctrine is available on-line.

Source Document: MCS UFD, Section 3.2.1.1.5.7.2.

Satisfaction Source: Threat doctrine data base files.

15.5.1.6.3 Provide Russian Doctrine

Description: Russian doctrine is available on-line.

Source Document: MCS UFD, Section 3.2.1.1.5.7.3.

Satisfaction Source: Threat doctrine data base files.

15.5.1.6.4 Provide Iraqi Doctrine

Description: Iraqi doctrine is available on-line.

Source Document: MCS UFD, Section 3.2.1.1.5.7.4.

Satisfaction Source: Threat doctrine data base files.

15.5.1.6.5 Provide Regional Combat Studies

<u>Description</u>: Regional combat studies are available on-line. Examples might include, Bosnia-Herzogovina, Somalia, and the National Training Center (NTC), Combined Arms Maneuver Training Center (CMTC), and Joint Readiness Training Center (JRTC) OPFORs.

Source Document: MCS UFD, Section 3.2.1.1.5.7.5.

Satisfaction Source: Threat doctrine data base files.

15.5.1.7 Provide ABCS User's Manuals

<u>Description</u>: Users require the capability to research information from the ABCS User's Manuals.

Source Document: STACCS UFD, Section 3.2.1.5; AGCCS SSS, Section 3.2.1.4.19.1.

Satisfaction Source: ABCS User's Manuals data base.

15.5.1.8 Provide On-Line Force Doctrine

<u>Description</u>: Users require the capability to display current versions of field manuals, student texts, army regulations, guides, handbooks, and weapons data for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.

Satisfaction Source: Force doctrine data base files.

15.5.1.8.1 Provide Access to FM 100-5

<u>Description</u>: Users require the capability to display the current version of FM 100-5 for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.1.

Satisfaction Source: Force doctrine data base files.

15.5.1.8.2 Provide Access to FM 101-5

<u>Description</u>: Users require the capability to display the current version of FM 101-5 for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.2.

Satisfaction Source: Force doctrine data base files.

15.5.1.8.3 Provide Access to FM 100-15

<u>Description</u>: Users require the capability to display the current version of FM 100-15 for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.3.

Satisfaction Source: Force doctrine data base files.

15.5.1.8.4 Provide Access to FM 6-20

<u>Description</u>: Users require the capability to display the current version of FM 6-20 for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.4.

Satisfaction Source: Force doctrine data base files.

15.5.1.8.5 Provide Access to C&GSC ST 100-9

<u>Description</u>: Users require the capability to display the current version of C&GSC ST 100-9 for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.5.

Satisfaction Source: Force doctrine data base files.

15.5.1.8.6 Provide Access to Weapon Data

<u>Description</u>: Users require the capability to display friendly and enemy weapon systems data for the user's reference.

Source Document: MCS UFD, Section 3.2.1.1.13.6.

Satisfaction Source: Force doctrine data base files.

15.5.1.9 Access Library Information

<u>Description</u>: Users will be able to access library information, to include photographs, text, maps, graphics, databases, and tables.

Source Document: STACCS UFD, Section 3.2.1.5.1.

Satisfaction Source: Reference library data base files.

15.5.1.10 Provide Standard Encyclopedia Search Interface

<u>Description</u>: Users will have a standard encyclopedia interface with which to search for information, regardless of the source or location of the information. The encyclopedia application will allow the user to begin a search, gather an initial list of possible information sources, refine the search, and select final documents for use.

Source Document: STACCS UFD, Section 3.2.1.5.2.

Satisfaction Source: Reference library data base files.

15.5.1.11 Move Between Related Documents

<u>Description</u>: Users require the capability to refine the information search, and to achieve increasing levels of detail, by rapidly traversing between related documents. Users will have a capability that links a particular part of the currently displayed document to other related documents, data bases, programs, or graphics information.

Source Document: STACCS UFD, Section 3.2.1.5.3.

Satisfaction Source: Reference library data base files.

15.5.1.12 Provide Encyclopedia Graphic Interface

<u>Description</u>: Users require a graphical user interface (GUI) that integrates the encyclopedia function with other ABCS data bases and applications. A user will be able, for example, to point and shoot at an object in SITMAP and retrieve information (photo, text, etc.) in a window.

Source Document: STACCS UFD, Section 3.2.1.5.4.

Satisfaction Source: Reference library and other ABCS data base files and applications.

15.5.1.13 Create Information Summaries

<u>Description</u>: Users researching a topic will be able to extract information from one or several sources, paste it to a new information summary document, edit it, save the new document, and transmit it to other users. The summary will reference the original sources of the information it contains.

Source Document: STACCS UFD, Section 3.2.1.5.5.

Satisfaction Source: Reference library data base files.

15.5.1.14 Add and Update Information

<u>Description</u>: Users of the encyclopedia application will be able to add new information and update old information. Update authority will be limited to users with specific permissions who have functional responsibility for the category of information.

Source Document: STACCS UFD, Section 3.2.1.5.6.

Satisfaction Source: Reference library data base files.

15.5.1.15 Provide Geographical Index Capability

<u>Description</u>: Users require a gazetteer that provides them with a geographic index of names and coordinate locations of cities, towns, countries, major terrain features (rivers, lakes, oceans, mountain ranges, etc.), transportation features, ethnic and cultural features, and related information. The gazetteer will interoperate with the SITMAP, the terrain evaluation common function, the intelligence common function, and other analytical tools.

Source Document: STACCS UFD, Section 3.2.1.5.7.

<u>Satisfaction Source</u>: Reference library, terrain evaluation, and enemy situation data base files, and the SITMAP and ABCS analytical functions.

15.5.1.16 Retrieve Information Using Key Words/Phrases

<u>Description</u>: Users require the capability to retrieve reports and summaries using key words or phrases that identify particular areas of interest (including subject areas and geographical areas).

Source Document: STACCS UFD, Section 3.2.1.5.8.

Satisfaction Source: Reference library data base files.

15.5.2 Perform Language Translation

Description: Users require the capability to translate English text to other languages. Users require an application that provides them with the capability to translate English language text to a selected foreign language, and to translate text in the foreign language to English. The application will provide a dictionary and thesaurus in each language. It will automatically translate any user-selected document, applying correct rules of grammar and sentence structure, with an accuracy of not less than 95%. The tool will highlight for the user any areas of text in which it has a confidence factor for translation accuracy of less than 80%. The user also requires the application to translate spoken words and phrases of up to four (4) seconds in length with not less than 95% accuracy, both from English to the foreign language, and from the foreign language into English. The application will be speaker-independent and not require that each user train the system to recognize his or her individual voice in order to function to the required levels of accuracy. The application will provide a capability for word-to-word translations of at least 60,000 English words with at least 99.99% accuracy. This capability will be used for interoperability with Combined Forces and Allied command and control systems. Campaign Plans, OPLANs, OPORDs and selected messages will have access to this capability with an additional set of OPORD protected words.

<u>Source Documents</u>: MCS UFD, Section 3.2.3.4; STACCS UFD, Section 3.2.3.4; AGCCS SSS, Section 3.2.1.4.22.

Satisfaction Source: Foreign language data base files.

15.5.2.1 Perform German Translation

Description: Users require the capability to translate English text to German, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.1.

Satisfaction Source: Foreign language data base files.

15.5.2.2 Perform French Translation

Description: Users require the capability to translate English text to French, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.2.

Satisfaction Source: Foreign language data base files.

15.5.2.3 Perform Arabic Translation

Description: Users require the capability to translate English text to Arabic, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.3.

Satisfaction Source: Foreign language data base files.

15.5.2.4 Perform Hebrew Translation

Description: Users require the capability to translate English text to Hebrew, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.4.

Satisfaction Source: Foreign language data base files.

15.5.2.5 Perform Spanish Translation

Description: Users require the capability to translate English text to Spanish, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.5.

Satisfaction Source: Foreign language data base files.

15.5.2.6 Perform Greek Translation

<u>Description</u>: Users require the capability to translate English text to Greek, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.6.

Satisfaction Source: Foreign language data base files.

15.5.2.7 Perform Italian Translation

Description: Users require the capability to translate English text to Italian, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.7.

Satisfaction Source: Foreign language data base files.

15.5.2.8 Perform Korean Translation

Description: Users require the capability to translate English text to Korean, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.8.

Satisfaction Source: Foreign language data base files.

15.5.2.9 Perform Turkish Translation

<u>Description</u>: Users require the capability to translate English text to Turkish, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.9.

Satisfaction Source: Foreign language data base files.

15.5.2.10 Perform Swedish Translation

<u>Description</u>: Users require the capability to translate English text to Swedish, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.10.

Satisfaction Source: Foreign language data base files.

15.5.2.11 Perform Danish Translation

<u>Description</u>: Users require the capability to translate English text to Danish, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.11.

Satisfaction Source: Foreign language data base files.

15.5.2.12 Perform Flemish Translation

Description: Users require the capability to translate English text to Flemish, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.12.

Satisfaction Source: Foreign language data base files.

15.5.2.13 Perform Norwegian Translation

<u>Description</u>: Users require the capability to translate English text to Norwegian, and vice versa.

Source Document: MCS UFD, Section 3.2.3.4.13.

Satisfaction Source: Foreign language data base files.

GLOSSARY

CA - civil affairs A2C2 - army airspace command and control CADNET - Chemical Agent Detector Network AA - assembly area AARS - Advanced Airborne Radiac System CCIR - commander's critical information ABCS - Army Battle Command System requirements CDM - Chemcial Downwind Message AD - air defense ADMIN - administrative CEF - Civil Engineering File AFATDS - Advanced Field Artillery Tactical Data CFA - covering force area System CGM - computer graphics metafile AGCCS - Army Global Command and Control CHS - common hardware/software System **CHSTR** - Characteristics of Strategic Transportation AI - area of interest Resources File AMS - Automated Meteorological System CI - counter-intelligence ANBACIS - Automated Nuclear, Biological, and CIA - Central Intelligence Agency Chemical Information System CMO - civil-military operations CMTC - Combined Arms Maneuver Training Center AO - area of operations AOI - area of operations/interest COA - course of action APORTS - Aerial Ports and Air Operations Bases COMMZ - communications zone File CONPLAN - contingency plan ARTEP - Army Training and Evaluation Program CP - command post, or check point ASAS - All - Source Analysis System CPX - command post exercise ASSETS - Transportation Assets File CSS - combat service support AVN - aviation CSSCS - Combat Service Support Control System CTG - commander's training guidance AWN - U.S. Air Force Weather Network DAT - digital audio tape AWS - Air Weather System BAE - battlefield area evaluation DMA - Defense Mapping Agency BOS - battlefield operating system DMP - decision-making process BP - battle position DNBI - disease/non-battle injury BWD - basic wind data DP - decision point C&GSC - Command and General Staff College DSM - decision support matrix C2 - command and control DST - decision support template C2W - command and control warfare DTG - date-time-group C3CM - command, control, and communications EA - engagement area EDM - Effective Downwind Message

counter - measures

ENG - engineer

ENSIT - enemy situation

EPW - enemy prisoner of war

ET - embedded training

EW - electronic warfare

FAADC3I - Forward Area Air Defense Command,

Control, Communications, and Intelligence System

FAMSIM - family of simulations

FBCB2 - Force XXI Battle Command Brigade and

Below

FEBA - forward edge of the battle area

FLC - H - force-level control headquarters

FLOT - front line of own troops

FLS-S/W - force-level control software

FS - fire support

FSCOORD - Fire Support Coordinator

FSE - Fire Support Element

FTX - field training exercise

GEOFILE - Standard Geolocation File

GIF - graphics interchange format

GUI - graphical user interface

HQDA - Headquarters, Department of the Army

HUMINT - human intelligence

HVT - high-value target

IEW - intelligence and electronic warfare

IMETS - Integrated Meteorological System

INTSUM - intelligence summary

IPB - intelligence preparation of the battlefield

JEMP - Joint Exercise Management Program

JOPES - Joint Operation Planning and Execution

System

JRTC - Joint Readiness Training Center

JULLS - Joint Universal Lessons Learned System

KIA - killed-in-action

LFF - Logistics Factors File

LOC - line of communications

LOS - line-of-sight

LP - listening post

MBA - main battle area

MCS - Maneuver Control System

MDS - Meteorological Data System

MED DB - Medical Data Base

METL - mission essential task list

METT - T - mission, enemy, troops, terrain, and

time

MGRS - Military Grid Reference System

MIA - missing-in-action

MMC - material management center

MOPP - mission-oriented protective posture

MOS - military occupational specialty

MP - military police

MPACS - Military Police Automated Control

System

MSC - major subordinate command

MSI - multi-spectral imagery

MSR - main supply route

MT - mini-tutorial

NAI - named area of interest

NBC - nuclear, biological, and chemcial

NBCRS - Nuclear, Biological, and Chemical

Reconnaisance System

NDS - Nuclear Detonation Detection System

NET - new equipment training

NSN - national stock number

NTC - National Training Center

OEG - operational effectiveness guide

OP - observation post

OPLAN - operation plan

OPORD - operation order

OPSEC - operations security

PAO - Public Affairs Officer

PERINTREPS - periodic intelligence reports

PIR - priority intelligence requirement

PM - provost marshal

POL - petroleum, oil, and lubricants

POMCUS - pre-positioning of material configured

to unit sets

PORTS - Port Characteristics File

PRF - proficiency recognition file

PSC - principal subordinate command

PSS - performance support system

PSYOPS - psychological operations

R/S - reconnaisance and surveillance

ROE - rules-of-engagement

RP - release point

SC - specialty code

SIG - signal

SIR - Serious Incident Report

SITMAP - situation map

SOF - special operations forces

SOP - standard operating procedure

SORTS - Status of Resources and Training File

SP - start point

SQL - standard query language

SRF - standard reference files

SSS - System Segment Specifications

STACCS - Standard Theater Army Command and

Control System

STANAGS - standardization agreements

SVC FM LIB - Service Force Module Library

SWO - Staff Weather Officer

TAI - targeted area of interest

TASOSC - Theater Army Special Operations

Support Command

TCP - tactical control point

TEM - Terrain Evaluation Module

TOA - transfer of authority

TPFDD - time-phased force deployment data

TPL - time-phase lines

TRADOC - Training and Doctrine Command

TTD - Tactical Terrain Database

TUCHA - Type Unit Characteristics File

TUDET - Type Unit Detail Equipment File

UAWS - U.S. Army Automated Weather System

UFD - User Functional Description

UIC - unit identification code

WIA - wounded-in-action

WWMCCS - Worldwide Military Command and

Control System